



Dr. Arnold Gesell



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CHILD DEVELOPMENT

AN INTRODUCTION
TO THE STUDY OF HUMAN GROWTH

I. *Infant and Child in the Culture of Today*

II. *The Child from Five to Ten*

By

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CHILD DEVELOPMENT

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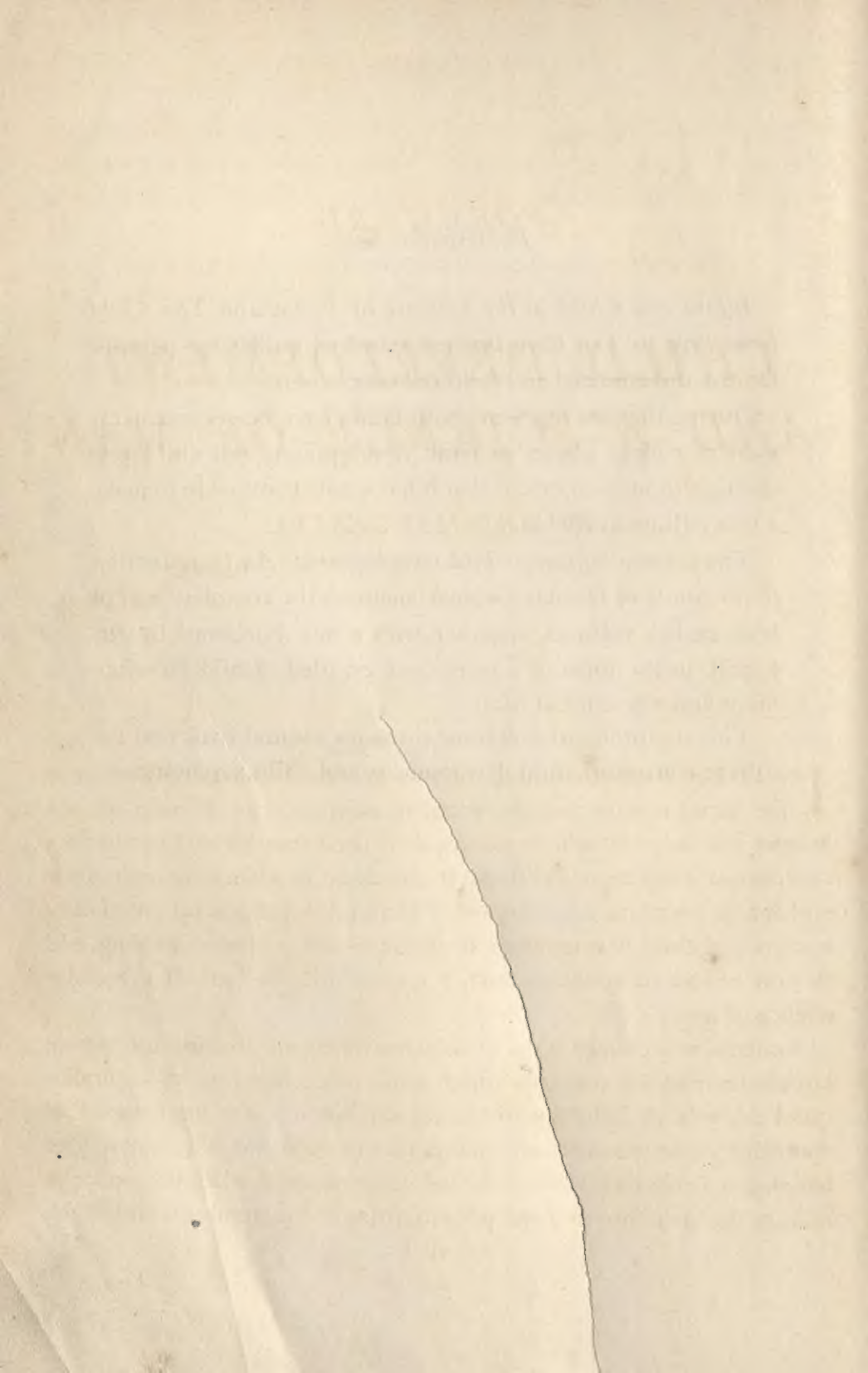
Publisher's Note

Infant and Child in the Culture of Today and *The Child from Five to Ten* have become standard guides for parents, known and admired and followed everywhere.

During the past few years both books have been extensively used in college classes in child development and child psychology, to such an extent that it has seemed advisable to make a text edition available.

The present volume, *Child Development: An Introduction to the Study of Human Growth*, includes the complete text of both earlier volumes, together with a new Foreword by Dr. Gesell, in the form of a brief essay entitled "Child Development and a Science of Man."

This comprehensive volume provides a sound basic text for college courses in child development and child psychology.



FOREWORD

CHILD DEVELOPMENT AND A SCIENCE OF MAN

BY ARNOLD GESELL

IN THESE days of cultural crisis we are made increasingly aware of the social origins and the social consequences of modern science. Science not only transforms society. It is itself transformed by the very civilization it has shaped. We are in the midst of a world re-orientation which will necessitate, among other things, the purposeful creation of a science of child development adequate to new patterns of living, and to new modes of conduct. Such a science will be part of a broader science of man.

Students at a college level of inquisitiveness are looking for factual knowledge and for concepts which will enable them better to understand the strange behavior of the human species—the dual nature of man which is so paradoxically manifested in good and evil. Our species has had a venerable history. It has taken Nature a billion years to fashion the structure and the potentialities of the human infant. Each

newborn baby is a focal end product of aeons of evolution. His heritage is so vast that it takes him a score of years to grow up and to achieve a measure of psychological maturity. How can we possibly understand him as an individual or as a representative of the species without examining the growth process whereby he attains maturity?

Birth marks the arrival but not the true commencement of an individual. The life career of the individual begins with conception when the genes of father and mother unite and initiate a cycle of growth. A minute globule of protoplasm becomes an embryo, the embryo becomes a fetus, the fetus an infant, the infant a child, the child a youth, the youth an adult, the adult a parent. With parenthood another cycle of growth is liberated.

The genes initiate the mental as well as the physical products of growth. From the earliest stage the child develops as a unit. He comes by his mind in the same way that he comes by his body, namely, through the organizing processes of growth. Growth, therefore, is the key concept for understanding the nature and the needs of the child mind.

The mind does not have a fixed separate existence within a bodily dwelling. It is part and parcel of an indivisible growing organism, responsive to the joint influence of the genes and of the environment. The mind cannot be regarded as pure energy for it is a patterned and a patterning system. Indeed, the mind of the child is a living, growing action system. Our task in the present volume will be to trace the growth of that action system in the first ten years of life.

This volume combines two previous publications into a single textbook. The prefaces and introductory statements which follow will show that the two constituent volumes are closely and organically related to each other. The first volume deals with the patterning of behavior in the first five years of life; the second continues this developmental delineation through the years from five to ten. The term behavior is broadly construed with equal emphasis on motor, adaptive, language, and personal-social manifestations. Behavior characteristics are charted for seventeen age levels, beginning with the 4-week-old infant. The

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data are based upon periodic, longitudinal studies of groups of normal children by the staff of The Clinic of Child Development at Yale University. These studies included clinical developmental examinations; surveys and observations of home life, school life, and nursery-school behavior; and countless interviews with the parents of the children, who naturally enough proved to have rich funds of vital information concerning their offspring. This information increased in value with each periodic contact; for each time we were able to explore two basic questions: (a) How has your child changed since the previous visit? and (b) In what ways has he remained the same? The answers to these questions, in conjunction with our independent examinations and observations, afforded double glimpses into the dynamics of development on one hand and the basis of individuality on the other.

In spite of a bewildering multiplicity of detail, our findings gave unmistakable evidence of growth gradations and of growth trends. The lawfulness of growth forces inevitably left characteristic marks on the resultant patterns of behavior. The data therefore yielded to analysis. Some 3,000 concrete behavior items were available for classification in 42 subdivisions of ten major fields of child development as follows: motor characteristics, personal hygiene, emotional expression, fears and dreams, self and sex, interpersonal relations, play and pastimes, school life, ethical sense, and philosophical outlook. In the closing chapters of the present volume, the manifold behavior items are tabulated as growth gradients for seventeen progressive age levels from birth to ten years.

The gradients are so arranged as to reflect the actual course of psychological development. Their sequences have a high degree of validity and give perspective to past and future trends of a normal growth cycle. Incidentally the growth sequences also throw a sidelight on the dual nature of man—his innate bipolarities of compliance and initiative, of sociality and self-assertion, cooperation and competition. The growth gradients help us to interpret the interactions of the biological organism and of the cultural environment. They suggest a principle of develop-

mental relativity which in turn suggests the shortcomings of arbitrary absolutes and of empty abstractions.

A purely functional psychology can scarcely explain human and child nature. Functions do not operate in vacuo, and our comprehension of child behavior must begin with a factual knowledge of its conformations and patterns. Viewed as a growing complex of action patterns, the mind has a developmental anatomy. The mind has architecture. Behavior patterns challenge the same interest in structured form which the disciplines of embryology and physical anthropology demand. Maturity traits represent the achieved and the nascent anatomy of the total action system of the child.

Once the maturity level of a given behavior is ascertained, it is safer to speculate as to esoteric causes and submerged forces which determine personality formation. It therefore seems wise to use the concept of emotion with due caution. The present volume emphasizes the morphology of emotions rather than their dynamic essence. Emotions do not operate as entities nor as general forces, but as configured structures and patterns within a growing action system. All dynamisms are subject to the single encompassing and unifying dynamism of development.

Accordingly, growth becomes a key concept for the interpretation of man as a species and as an individual. Every child has a unique pattern of physical and mental growth, which constitutes the core of his individuality. One task of the life sciences is to make that individuality more intelligible.

Our present-day knowledge of the child's mind is comparable to a fifteenth-century map of the world—a mixture of truth and error, with the heads of strange sea monsters ominously rising out of the dark depths of uncharted seas. Vast areas remain to be explored. Much of our knowledge is disjointed and topical; many current ideas are sheer speculative derivations rather than the fruit of observation. There are scattered islands of solid, dependable fact, uncoordinated with unknown continents. Under the mounting influence of biological ration-

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alism, however, the unfinished map of the child's world is taking on more accuracy and design.

The same biological rationalism under the impacts of the atomic age will lead to a more comprehensive science of man, enabling him to become more consciously an agent in his own evolution. A science of man under heightening social pressures should help to define the mechanisms, the principles, and in some measure the very goals of child life and of family life. This will put knowledge into more usable form for the implementation of a mental hygiene of infancy and childhood. A broadly based clinical science of child development will draw upon medical and social research: upon embryology, neurophysiology, biochemistry, genetics, and physical anthropology to elucidate the nature of the human organism; upon developmental psychology, factual psychiatry, and cultural anthropology to elucidate the interplay of organism and personal milieu.

The diversity of the disciplines which must contribute to a comprehensive science of man may seem dismaying. Fortunately, however, the very concept of development serves to integrate and to simplify the multiplicity of data. This concept is monistic; it resolves the dualisms of organism and environment; of heredity and habit; of structure and function; of mind and body. To some extent it even reconciles the antithesis of health and disease, because it places all functional manifestations in a single unifying frame of reference, namely, the ontogenetic cycle of human growth.

It is not surprising, therefore, that a developmental philosophy of child care should have far-reaching implications for a better understanding of ourselves and of the democratic way of life.



CHILD DEVELOPMENT

I. INFANT AND CHILD IN THE CULTURE OF TODAY

*The Guidance of Development
in Home and Nursery School*

BY

ARNOLD GESELL, M.D.

FRANCES L. ILG, M.D.

IN COLLABORATION WITH

JANET LEARNED, M.A.

LOUISE B. AMES, PH.D.

INFANT AND CHILD IN THE CULTURE OF TODAY

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PREFACE

This book was written and completed in the midst of a war which is bringing untold misery to countless infants and children. And the aftermath has not yet come. This book deals with the amenities of civilization; indeed with the refinements of child care. Were it not that the democratic countries are bent on strengthening the very cultures which are being assailed, one might well wonder why this book should be written at all. Even England, the mother country of the nursery school movement, is at this hour undertaking great programs in the field of child welfare. America has just allocated \$6,000,000 for war nursery schools, which with participation of local sponsors may bring a total of 105,000 children into group care nurseries,—nurseries created to make additional thousands of women available for war production. And this is

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only a beginning. The present cultural crisis is making unusual demands upon our methods and standards of child care. In the post war period these demands will increase.

Now more than ever we need an adequate philosophy of child development to shape our social planning and our practices in home and school. It has become clear that the concept of democracy embraces all aspects of everyday life. This volume considers the deep significance of a democratic culture for the psychological welfare of infants and young children.

The concept of growth has much in common with the ideology of democracy. In the fifteen chapters of Part Two the growth characteristics of the early years are formulated in concrete detail, with special reference to the factors of maturity which must determine our whole outlook upon the nature and needs of the individual child. These growth characteristics are so fundamental that not even the most modern culture can supersede them. A culture is refined through a discriminating recognition of these characteristics. The relationships between a child and his culture are highly reciprocal.

It will be evident from the detailed character of the contents that this book could be written only as a cooperative undertaking. It is the outgrowth of many years of practical experience with normal, near normal and problem children. The experience was correlated with a systematic program of research under the auspices of The Clinic of Child Development of The School of Medicine, Yale University. Infants and young children have been studied with parental cooperation, in the home, at well baby conferences, and in the service division of the Guidance Nursery of the Yale Clinic. The development of personality characteristics of the children has come under consecutive observation by members of the staff. On the basis of this clinical and developmental investigation, detailed methods of individualized guidance have been formulated.

The children studied came from homes of varying socio-economic status in New England. A special group of fourteen Swedish infants was intensively studied by Dr. Ilg, in 1936-37, while she was in residence

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in Stockholm. The nursery school children have in general been above an average level of intelligence. The parents of all these children have assisted us with a high order of cooperation. We have learned much from them as well as from the children. We are also gratefully indebted to Miss Anne Lockwood, guidance teacher in the Yale Nursery, who assisted in the gathering of observations of children in her charge.

Dr. Catherine S. Amatruda, Assistant Professor of Child Development, read the manuscript in part, and gave us the benefit of valuable criticism. Dr. Amatruda is co-author of a volume on *Developmental Diagnosis: Normal and Abnormal Child Development*, published by Paul B. Hoeber, Inc., Medical Book Department of Harper & Bros. We wish to thank Mr. Hoeber for the special permission to use selected line drawings, based on cinema photographs, which appear as illustrations in Part Two.

J. B. Lippincott & Co. have kindly permitted certain references to an earlier publication by Gesell & Ilg, entitled *Feeding Behavior of Infants: A Pediatric Approach to the Mental Hygiene of Early Life*. The present volume is in many ways a further development of these earlier studies.

We are most fundamentally indebted to the Rockefeller Foundation, which over a period of years has given generous long range support to the systematic investigations which underly the present work. The more recent and extremely timely support of The Carnegie Corporation of New York has made the completion of this work possible.

The general plan and construction of this book are outlined in the Introduction. The practical details of certain chapters and of the Appendix, are clearly and directly addressed to professional and lay workers in the field of early child welfare and education. This would include parents as well as teachers, social workers, nurses and physicians. The material covering the preschool ages has been presented in such a way as to make it serviceable in the guidance of young children whether or not they attend nursery school. We have deliberately drawn no sharp lines between home and nursery school, and infants and preschool children. It is culturally very essential that the whole period from birth to

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six years should be socially treated as a single area and in consecutive sequence. Even the elementary school teacher might profit by more familiarity with the psychological development of the first five years of life, the most fundamental and formative years in the cycle of the child's growth.

We have used the term culture rather flexibly to denote not only organized institutions and folkways; but also the persons, chiefly parents, in the actual process of expressing those folkways by the rearing of children. We hope that the cultural anthropologist will find in the details of the main body of this volume a concrete documentation of behavior patterns which are delineative of the present day culture and its goals. Cultural anthropology begins at home, and this book deals with domestic behavior in its early relations with the social order.

America, more than any other country in the world, has dedicated its scientific resources and good will to the furtherance of the free development of her children. This is part of the genius of American democracy; and it is a part which should be cherished and protected even in a world crisis.

ARNOLD GESELL

New Haven, Connecticut
July 31, 1942

INTRODUCTION

PLAN AND PURPOSE

THE general plan of this book is evident from the analytic table of contents. We are dealing with the growing child in a modern culture. He is endowed with innate growth capacities which express themselves psychologically in patterns of behavior. But the culture has heavy demands to make on its children. How are the natural growth characteristics of infant and child brought into harmony with these cultural pressures? What are the relationships between the pressures of natural growth (maturation) and the pressures of the social order (acculturation)? The answers to these questions will determine our attitudes and our practices in the psychological care of infant and child.

The main body of this book, therefore, addresses itself in PART TWO (chapters 7-21) to a factual statement of the mental growth characteristics of the first five years of life. Twelve age periods are separately treated. The most typical traits and growth trends of each age are summarized in

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a *Behavior Profile* (§1) and a *Behavior Day* (§2). By reading the twelve behavior profiles in consecutive series, it is possible to get an impression of the continuous flow of the stream of development. But for reference and comparative study, it is convenient to have all of the facts concerning a given level of maturity assembled in a single chapter. Indeed, this book is so constructed that each chapter is in large measure self-contained and can be read as an independent unit.

We regard the formal concept of chronological age and the functional concept of maturity level as indispensable both for practical common sense and for the science of child development. In the guidance of children it is absolutely necessary to consider the age values of behavior and the behavior values of age. The reader is warned, in advance, however, that *the age norms are not set up as standards and are designed only for orientation and interpretive purposes*. These precautions are discussed in Chapter 6 §4. The prevalence and significance of individual variations are recognized at every turn. Indeed, it is through the norms that we become conscious of such variations. The subject matter of PART TWO is codified in terms of age to clarify the generic, innate sequences of development, and to define some of the more usual deviations which determine the individuality of the child. The ages chosen for discussion are for the most part nodal ages which correspond to periods of relative equilibrium in the progressions toward maturity.

The *Behavior Profile* gives us a picture of the kind of child with which the culture has to deal at a certain stage of his maturity. The *Behavior Day* (§2) in brief informal narrative, outlines the manner in which the culture makes practical provisions for fostering the growth and the activities of the child at advancing ages. Both from a developmental and a cultural point of view, the *day cycle* is extremely fundamental. It determines the distributions and expressions of the child's energies. It reflects the methods and goals of child care in our present day culture.

The behavior day is illustrative and is not set up as a model. It is intended to give suggestive orientation. Behavior days will vary with circumstances and individual differences. Specific variations in behavior

and numerous details of child care are summarized in double column under such headings as sleep, feeding, elimination, bath and dressing, self-activity and sociality. The reader may consider these details as elaborated specifications and footnote references which can be consulted for practical purposes. Concrete guidance suggestions are enclosed in brackets.

When a child reaches the age of 18 months, his behavior extends beyond the confines of the home. He goes abroad. He may attend a nursery school. His behavior has an enlarged cultural significance. Accordingly, the chapters which treat the five age levels from 18 months through 4 years (Chapters 15-19) carry special sections entitled *Cultural and Creative Activities* (§3), *Nursery Behavior* (§4), and *Nursery Techniques* (§5). These sections portray the life of the preschool child in the social group. Some of the detail is directed to nursery and guidance teachers; but the subject matter is treated in a functional manner which may be of interest to the general reader, as well as parents, and students of child psychology. The chapter on *The Nursery School as a Guidance Center* was written with the general reader as well as the professional teacher in mind. It is hoped that the chapters in their entirety, both descriptively and by implication, will not be without significance for the student of cultural anthropology. The child's behavior day epitomizes many important aspects of the culture-complex of today.

It will be noted that our presentation makes no sharp distinction between the infant and the nursery school child, also called the preschool child. The nursery school movement in America has been singularly detached and has taken slight note of the two years of infancy which precede nursery school attendance. Every nursery school child was once an infant; moreover, he spends most of his behavior day at home even when he is enrolled as a nursery schooler. The arrangement of Chapters in PART TWO is intended to place these considerations in proper perspective. The relationship between home and school is obscured if the perspective is blurred, or if the home-life and the antecedent infancy of the child are overlooked. Certainly the nursery school cannot function intelligently

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as a guidance agency unless the details of home behavior are more intimately appreciated.

Teachers in the elementary school grades also need the perspective which comes from a comprehension of the psychology of child development as opposed to the psychology of learning. The professional training of school teachers should include a liberalizing acquaintance with the developmental psychology of infancy to offset the stilted text-book limitations of an educational psychology too narrowly based on a study of "the learning process."

The underlying concept of the present volume is the concept of growth. This concept is essential not only for estimating the true nature of the child, but the reciprocal relations between the child and his culture. Indeed, one of the crucial tests of any culture-complex is the degree to which it gives scope to the nature and needs of growth, both in its children and adults. This test is of special importance in a democratic culture.

PART ONE, entitled GROWTH AND CULTURE, considers in a broad way the interaction of inner and cultural forces. The family is the pivotal center at which this interaction comes to most significant expression. The household is a cultural workshop for transmitting the social inheritance: a democratic household fosters a way of life which respects the individuality of the growing child. The child as an organism and the environment as a culture are inseparable. Each reacts upon the other. The reactions of the child are primary: he must do his own growing. The culture helps him to achieve his developmental potentialities, helps him to "learn," but the process of acculturation is always limited by the child's natural growth process. Child and culture come into conflict when the two processes are not balanced and accommodated to each other.

Chapters 2 and 3 consider the relations between maturation and acculturation. How does the mind grow? It grows like an organism in a *world of things*. It becomes a person in a *world of persons*. There are general, insuperable laws of growth which govern the patterning of behavior. But infants are individuals. Every child has a unique pattern of growth which is the essence of his individuality.

The guidance of development requires a discerning recognition of these factors of individuality, discussed in Chapters 4 and 5. Beginning with birth, and indeed before birth, as suggested in Chapters 7 and 8, it is necessary to recognize the import of individual differences. There are differences which cannot be combatted by culture with impunity.

It is rather the task of culture to be alert to the growth needs and growth demands of the child. He must do his own growing. He must achieve a measure of self-regulation. The fullness of that measure depends upon the insight and wisdom of the culture. Chapter 5 considers the problem of self-regulation through cultural guidance,—a peculiarly important problem in the culture of today.

The chapters of PART THREE return to a consideration of this broad problem and its implications. Child guidance is growth guidance. The refinements of the psychological care of normal and deviate child alike depend upon a *developmental philosophy*. A genetic approach is more important than rule of thumb and clever modes of discipline. A developmental outlook permits us to see the total tide of development in perspective. This gives a constructive forward reference to our methods and a more tolerant understanding of the difficulties of immaturity.

✓“Development” is often an empty abstraction. We have attempted to give form and substance to the concept of growth by formulating in abundance the specific patterns of behavior which express the maturity of infant and child. In chapter 23 we make a sweeping survey of the entire growth complex, including sleep, feeding, bowel and bladder behavior, personal and sex interests, self-activity and sociality. This survey is intended to demonstrate the interrelatedness and the lawful sequences of behavior patterning for the entire period from 4 weeks to 5 years of age. Developmental perspective gives both assurance and direction to the practical procedures of child care and guidance.

The concluding chapter (Chapter 24) reverts to our fundamental thesis: the significance of a *developmental philosophy* for the practice of child guidance, and for the folkways of our culture,—the culture of tomorrow as well as today.

INTRODUCTION

The present tragic status of the world confronts us with three propositions: (1) democracy demands respect for individuals; (2) infants are individuals; (3) the science of human behavior and individuality can really flourish only in a democracy. These three propositions interlock in a significant way and testify to the social importance of a more adequate science of child development in a democratic culture. Such science will also lead to a more equitable distribution of developmental opportunities for infant and child.

Surrounded by modern gadgets and conveniences, it would seem that the developmental welfare of the child is amply safeguarded. But it is now all too apparent that the matériel of a culture does not in itself insure life, liberty, and happiness even for its children.

No previous culture has ever achieved a product more magnificent than the present body of natural and engineering science. This achievement is our hope, as well as our despair. The despair will not lessen until the techniques of modern science can be more sincerely brought to bear on problems of behavior. Only through profound self-knowledge can the human mind bring itself nearer to individual and collective control. This knowledge must begin with an understanding of infants and young children. And that knowledge must extend into the homes of the people; for the household is the "cultural workshop" where human relationships are first formed.

PART ONE

GROWTH AND CULTURE



1

THE FAMILY IN A DEMOCRATIC CULTURE

§1. THE HOUSEHOLD AS A CULTURAL WORKSHOP

THE family remains the most fundamental unit of modern culture. It has been basic throughout the long history of man. The family is both a biological and a cultural group. It is biologic in the sense that it is the best arrangement for begetting children and protecting them while they are dependent. It is a cultural group because it brings into intimate association persons of different age and sex who renew and reshape the folkways of the society into which they are born. The household serves as a "cultural workshop" for the transmission of old traditions and for the creation of new social values.

The spirit and organization of the family therefore reflect the historic culture. A totalitarian "Kultur" subordinates the family completely to the state, fosters autocratic parent-child relationships, favors despotic

discipline, and relaxes the tradition of monogamy. It is not concerned with the individual as a person. A democratic culture, on the contrary, affirms the dignity of the individual person. It exalts the status of the family as a social group, favors reciprocity in parent-child relationships, and encourages humane discipline of the child through guidance and understanding.

In a very profound way the democratic ideal is also bound up with the spirit of liberty. Liberty is the life principle of democracy, in the home as well as in the community. The home, like the state, has its problems of government and must give controlled scope to the spirit of liberty which animates the growing child. Every living organism strives to attain a maximum of maturity. The spirit of liberty has its deepest roots in the biological impulse toward optimal growth. Babies as well as adults are endowed with this inalienable impulsion.

The concept of democracy, therefore, has far-reaching consequences in the rearing of children. Even in early life the child must be given an opportunity to develop purposes and responsibilities which will strengthen his own personality. Considerate regard for his individual characteristics is the first essential.

Considerateness, it has been well said, is in itself a social system. The very word conveys the idea of respect for the dignity of the individual. If parents and teachers begin with the assumption that they can make over and mold a child into a preconceived pattern, they are bound to become autocratic. If, on the contrary, parents begin with the assumption that every baby comes into the world with a unique individuality, their task will be to interpret the child's individuality and to give it the best possible chance to grow and find itself.

Considerateness, as we use the term here, is not merely a social grace. It is something of an art, a combination of perceptiveness and imaginativeness which enables one person to appreciate the psychology of other persons. It is an alert liberalism which is sensitive to distinctive characteristics in other individuals. It is a kind of courtesy to which infants are entitled.

Infants are individuals,—individuals in the making as well as by birth-right. To understand their individuality it is necessary to sense the underlying processes of development which are at work.

The child's personality is a product of slow and gradual growth. His nervous system matures by stages and natural sequences. He sits before he stands; he babbles before he talks; he fabricates before he tells the truth; he draws a circle before he draws a square; he is selfish before he is altruistic; he is dependent on others before he achieves dependence on self. All of his abilities, including his morals, are subject to laws of growth. The task of child care is not to force him into a predetermined pattern but to guide his growth.

This developmental point of view does not mean indulgence. It means a constructive deference to the limitations of immaturity. It obliges us to accord more courtesy even to the infant, who is often unwittingly handled in an arbitrary manner simply because we have failed to understand the processes of development.

Only in a democratic climate of opinion is it possible to give full respect to the psychology of child development. Indeed the further evolution of democracy demands a much more refined understanding of infants and preschool children than our civilization has yet attained. Should science ever arrive at the happy juncture where it can focus its full force upon the interpretation of life, it will enable us to do more complete and timely justice to the individual personality in the very young. And this in turn will have far-reaching effects upon the adult population.

§2. THE FUNCTIONS OF INFANCY

IN A biological sense the span of human infancy extends from the zero hour of birth to the middle twenties. It takes time to grow. It takes about twenty-four years for an American youth to reach the stature of maturity. For convenience one may think of this cycle of growth as a succession of

four stages of six years each: (1) the preschool years; (2) the elementary school years; (3) the high school years; (4) the preadult years.

We are now beginning to see this cycle of growth in its true perspective. Thus far, for sound social reasons, the middle twelve years have received most of the attention of the public-school system. These are indeed important years for the transmission of cultural inheritance, but the demands of society and the findings of science are compelling us to see the cultural significance of the preschool years—the fundamental years which come first in the cycle of life and which therefore must have a certain priority in all social planning. Coming first, they have a profound formative influence on all the years that follow.

The extreme helplessness of the human infant has provided a perplexing problem for philosophers. Why is man, the king of creation, the most dependent of all creatures during his early life? Over a century ago, Madame Necker de Saussure answered this question in quaint but convincing language:

“If it was the design of the Creator in respect to man that the immortal spirit should receive a strong impulse from the present life, the means of making him pursue the most extended course of development was to place him the lowest degree at its beginning. Hence his state of privation and ignorance in infancy.

“Preoccupied with considering what is wanting in the child, we forget the liberality of nature with respect to him. We do not observe that the order of development made necessary by his ignorance is the most advantageous to morality as well as to the progress of his reason.”

These statements show a deep genetic insight into the meaning of infancy. They are all the more creditable, because they antedate the period of modern biological science, which has thrown such a flood of light on the nature and origins of man.

Darwin's epoch-making book, *THE ORIGIN OF SPECIES*, led to the revolutionary concept that human infancy was evolved to subserve the needs of racial inheritance and of individual growth. Infancy, in this sense, is a positive, adaptive trait,—one of the major end-products of ages

FUNCTIONS OF INFANCY

of evolution. During these ages the period of human infancy has been gradually prolonged. It is man's distinction that he has the longest infancy.

Some creatures have virtually no infancy at all. Some birds are so precocious that they fly immediately on hatching. The golden eaglet, however, requires eleven weeks before it spreads its giant wings in full flight. Not until the age of 12 weeks is it buffeted by its parents and driven forcibly from home by them. The guinea pig shifts for himself three days after birth. It takes the white rat as many weeks. The chimpanzee becomes an adult at about the age of 9 years. The more complex and advanced the mature organism, the longer the period of infancy. It takes time to grow. Infancy is that time.

Human infancy is also the time for acculturation. The infant emerges out of the racial stream. Birth thrusts him into a man-made world crowded with the furniture, appurtenances and compulsions of a modern culture. One of the durable problems of culture is to bring about an optimal adjustment to this intricate world by supplying optimal conditions of child development.

The infancy of the human species has been prolonged and its plasticity has been greatly augmented; but the new-born baby does not by any means start from scratch. He is at birth already in possession of all the nerve cells he will ever have. These cells have much capacity for learning; but to no small extent their organization has been either fixed or channelized by the countless generations of a past which stretches back into a vista of a billion years. The infant of today is a token of that past as well as a promise of the future.

A baby is not only a specific embodiment of a future adult; he is a generic embodiment of the venerable past of the human race. He represents a vast cloud of ancestral witnesses compacted into a single individuality. He is the inheritor of the ages. His nervous system is the carrier of an immense series of evolutionary adaptations, by means of which the race consolidated its most essential achievements. These achievements are now the common property of mankind; but once they were creations.

The evolution of the human species has been a creative process on a cosmic scale. The human infant as the current custodian of that process revives in telescoped compression its immemorial creativity. He acts like a creator because he is basically a re-creator of what happened long ago, once upon a time. He is an innovator because he is a rehearser. Infancy is both conclusion and preface.

The nineteenth century is sometimes called Darwin's century. Darwin, through the concept of evolution, gave us a better understanding of the nature and the origin of man as a biologic species. The present century is preeminently concerned with man as an individual. If our democratic culture survives, the task of science and society will be to define the nature and the status of the individual. This task comes to its first and fundamental test in the family life of a democratic culture.

2

HOW THE MIND GROWS

THE baby has been born. What will he be like when he is grown? By the end of the first five years we shall have a fairly clear indication of his physical and mental "make-up". Even now, soon after birth, some observers note that "he is the very image of . . ." His nose may already have assumed its typical shape, although his head and other facial features are destined to undergo gradual transformations. Physical growth is a modelling process which produces changes of form, and at the same time preserves a basic constancy of form. That is the paradox of all growth,—the baby remains himself despite the fact that he is constantly changing. It might even be said that he is never so much like himself as when he is changing! This is because he has a distinctive way of developing which denotes the essence of his individuality.

§1. THE PATTERNING OF BEHAVIOR

MENTAL growth, like physical growth, is a modelling process which produces changes in form. Or we might say that mental growth is a *patterning process*, because the mind is essentially the sum total of a growing multitude of *behavior patterns*. A behavior pattern is simply a movement or action which has a more or less definite form. An eye blinks; a hand grasps an object; a tongue protrudes to reject an object,—these are examples of behavior patterns in which a part of the body reacts to some stimulus. Or the whole body reacts as in sitting, standing, creeping, walking. These too are behavior patterns. A baby lying in his crib follows a dangled toy with his eyes: eye following is a behavior pattern. He extends his arms and then closes in on the dangled toy with both hands, seizes it, puts it to his mouth: that is another more complex behavior pattern, one which shows that the baby's mind is indeed growing,—changing and elaborating its forms of behavior with increasing maturity.

Behavior has form or shape in virtually the same sense that physical things have shape. For practical purposes we need not make a sharp distinction between physical patterns and behavior patterns. The baby is a unitary organism and from the very beginning he grows as a single unit. Even in the embryonic period months before birth, the living materials of this organism order themselves into patterned structures. Millions of microscopic muscle cells assemble into bundles attached to ligaments and levers. Millions of microscopic nerve cells, marshalled by forces of growth, penetrate into these muscular tissues. In due time impulses will pass through the nerve fibers into the muscle fibers to bring about movements. These movements will have a certain degree of pattern. We shall call them behavior patterns as soon as they take on a characteristic form. The growing mind consists of countless such patterns of behavior, made possible by the progressive organization of the nervous system.

All growth, whether physical or mental, implies organization. Con-

sider, for example, the early growth of eyes and hands. They are of particular interest because they play an extremely important part in the mental life of infant and child. The eyes are so important that Nature hastens to fashion them as early as the fifth week of the prenatal period. Each eye begins as a tiny cuplike bit of tissue. Within this cup the retina is formed. This retina consists of an extraordinary tapestry of specialized nerve cells which some day will be sensitive to images focused through a transparent lens. A portion of the optic cup becomes narrowed to form the optic nerve which terminates in an extensive jungle of nerve cells in the cortex or gray matter of the brain.

Later when a baby looks at an object he sees with these very brain cells. Looking is an active response. It is not mere sensory impression; it requires motor control. The baby must hold his eyes in position or move them from point to point in order really to see. This control is accomplished through twelve tiny muscles (six for each eye), which are attached to the eye ball and the eye socket. They are so tiny that they weigh only a fraction of an ounce. All twelve of them would easily go into a thimble, but they are among the most indispensable muscles in the baby's whole action-system. With them he fixates his visual attention; with them he scans his surroundings; with them he inspects objects which he holds in his hands.

Vision is so fundamental in the growth of the mind that the baby takes hold of the physical world with his eyes long before he takes hold with his hands. The eyes assume the lead in the patterning of behavior. But he cannot achieve full acquaintance with things through his eyes alone. He must touch them with his hands as well; feel their impact in his palm; and move his fingers over their surfaces and edges. Movement is an essential part of sense perception. He must move his hands to manipulate; just as he must move his eyes to inspect. The nerve cells which determine and direct his hand movements are located in the spinal cord and the brain.

The human nervous system consists of some twelve billions of nerve cells, and of countless nerve fibers which extend to, from, and twixt the bodies of these cells. The fibers are part and parcel of the individual cells

and by their inter-connections they make the whole nervous system a vast network which pervades every part of the organism,—lungs, gastrointestinal tract, bladder and bowel, genital organs, secretory glands, heart, and bloodvessels; the sensitive areas of skin, mucous membranes, joints and tendons, a dozen special organs of sense and the muscles of head, neck, trunk and extremities.

The growth of the mind is profoundly and inseparably bound up with the growth of the nervous system. This growth begins remarkably early. Five months before the baby is born all of the nerve cells he will ever possess have already been formed and many of them are prepared to function in an orderly way. At this time the fetus makes movements of arms and legs so vigorous that the movements can be seen and felt through the mother's abdominal wall (quickenings); the eyelids can wink; the eyeballs can roll; the hands can clasp; the mouth can open and close; the throat can swallow; the chest makes rhythmic movements in preparation for the event of birth, when the breath of post-natal life will rush into the lungs. All child development is like that; it proceeds with reference to the future. When the time comes the child is normally ready for what we may expect at that time. And he is never ready until the nervous system is ready.

How does the mind grow? It grows *like* the nervous system; it grows *with* the nervous system. Growth is a patterning process. It produces patterned changes in the nerve cells; it produces corresponding changes in patterns of behavior.

Let us examine further the development of eyes and hands. This will give us a concrete indication of the "structure" of the growing mind. The mind has structure in the sense that it is a unified, though intangible fabric constituted of patterns of behavior,—patterns which multiply and elaborate as the baby's nervous system matures.

The eyes of a newborn baby are apt to rove around both in the presence and absence of a stimulus. After several days or even hours, the baby is able to immobilize the eyeballs for brief periods. Later, he stares at surroundings for long periods. When he is 4 weeks old we may dangle

a ring (a four-inch red embroidery ring attached to a string) in the line of his near vision: he regards it. We move the ring slowly across his field of vision: he "follows" it with his eyes through an arc of about 90° . This means that the nerve cells which control those twelve tiny oculo-motor muscles have ripened and furthermore have made patterned connections with the grosser muscles which rotate the head. The mind must be growing, because behavior is patterning.

The baby has a psychology even during these early weeks when he cannot as yet balance his head on his shoulders. But this ability, too, is just around the corner. At 12 weeks the baby's eyes can follow the ring past the midline, through a full arc of 180° . At 16 weeks he holds his head steady when in the supported sitting position; he can even "pick up" a small quarter inch pellet with his eyes.

The eyes are still in the lead. It may take the baby twenty weeks more before he can pick up that self-same pellet with his hand. The hands and fingers come into their own later (when the requisite nerve cell connections have ripened). However, the infant can hold a rattle and look at it while he is holding it at the age of 16 weeks. That is a significant mental growth gain. It means that eyes and hands are doing team work, coming into more effective coordination. Mental growth cannot be measured in inches and pounds. So it is appraised by patterns.

The 24 week old infant can pick up an object on sight. At 36 weeks he can pick up the aforementioned candy pellet, opposing thumb and index finger. At 40 weeks he can poke it with his extended index finger. At 15 months he can pluck it with precise pincer prehension and promptly put it into the mouth of a bottle,—instead of his own mouth. This is truly a remarkably complex behavior pattern, which denotes a high degree of oculo-motor control; also a high degree of postural control of head, hands and trunk; coordination of guiding eyes and prehensory fingers; suppression of hand to mouth reaction; inhibition of grasp for purposes of release; satisfaction in the accomplished feat. Recall, for comparison, the almost aimless roving of the newborn baby's eyes and hands. The advance in his behavior patterns is a measure of his mental maturity.

Now it may as well be pointed out here that no one taught the baby this progressive series of eye-hand behaviors. He scarcely taught himself. He comes into his increasing powers primarily through intrinsic growth forces which change the inmost architecture of his nervous system. Of course he needs an environment in which to deploy his powers, and a favorable environment insures a favorable realization of his growth potentialities. In the next chapter we shall show how profoundly the organization of the personality of the child is influenced by the culture in which he lives. But the growth of personality is subject to the same growth laws which determine the development of eye-hand behaviors. Environmental factors support, inflect and modify; they do not generate the progressions of development. The sequences, the progressions come from within the organism.

What is the organism? It is living, growing protoplasm. The mind, so far as we can fathom it by direct observation, is an expression of the organization of this protoplasm, manifested in visible patterns of behavior. One of the scriptural parables relates how "the earth bringeth forth fruit of herself: first the blade, then the ear, after that the full corn in the ear." The growth of the child mind is not altogether unlike the growth of a plant. Of itself it brings forth its tokens; it follows inborn sequences. The tokens, however, we shall agree, are infinitely greater in their variety,—and much more exciting!

The plant has no structure which can compare in complexity with the myriad-celled nervous system. The nervous system with its prodigious capacities of growth and learning is the medium through which the mental life of the child is organized in terms of the past, and projected forward in terms of the future. This mental life embraces three levels of reality: (1) *the vegetative functions* of respiration, alimentation, elimination; (2) *the world of things*, in time and space; (3) *the world of persons*, in home and community. The child develops as an integrated unit, and he must simultaneously combine his adjustments at all three levels of reality. His mind does not grow on the installment plan. It grows as a unit.

The vegetative functions are governed by the so-called vegetative nervous system and are already highly organized by the time of birth. But not completely organized; because even physiological processes undergo change with age. Moreover certain rhythms of sleep, feeding and elimination must be adjusted to the culture into which the baby is born. We shall discuss this aspect of mental growth in Chapter 5.

As the mind grows it must become socialized. In some way the individual must preserve not only his vegetative existence; he must become a person among persons in a WORLD OF PERSONS. This constitutes the most bewildering task for the infant and child reared in the complicated culture of today. The organization of his personality depends on the manner in which he adjusts to human relationships. This phase of mental growth is so important that it will be considered in a separate chapter (Chapter 3).

§2. THE WORLD OF THINGS

IT REMAINS to sketch briefly the manner in which the growing mind accomplishes its more impersonal adjustments to the world of things,—the natural and man-made world of time and space. A famous couplet declares that the world is so full of a number of things that we all should be as happy as kings. But the realm of happiness lies rather more in the vegetative functions and in the romantic world of persons. In this chapter we confine ourselves to the physics and geometry of things, the most rudimentary rudiments of the science of Time and Space.

Grown adults take time and space for granted; not so the growing baby. The infant is not a scientist, yet he must master the very first principles on which all physical science is based. His mind is constantly taking first steps into the physical universe from the moment of birth. He has to acquire an appreciation of spatial *here* and *there* and temporal *now* and *then* by the gradual process of development. Perceptions are complicated behavior patterns based on reactions to things. He is not born with full-fledged perceptions; *they grow*. They grow with experience,

and with the advancing maturity of his sensory, motor and correlating nerve cells.

It has been picturesquely suggested that to the newborn baby the world is a "big, blooming, buzzing confusion". The accuracy of this characterization may be questioned. Much more probably the young baby senses the visible world at first in fugitive and fluctuating blotches against a neutral background. Sounds likewise may be heard as shreds of wavering distinctness against a neutral background of silence or of continuous undertone. Doubtless he feels the pressure of his seven pound weight as he lies on his back. Perhaps this island of pressure sensation is at the very core of his vague and intermittent sense of self. He also feels from time to time the vigorous movements which he makes with mouth, arms and legs. Doubtless he has delightful moments of subjectivity at the end of a repleting meal and he has episodes of distress from hunger or cold. Such experiences in association with strivings impart vividness to the early mental life of the baby; even though the outer world is still almost without form and void.

It remains formless until he can configure it with experience gained through his eyes and hands. He must first "learn" the art of wakefulness, and then he must "learn" to fasten his eyes on this object and that, and to unfasten them, too. The oculo-sensory and oculo-motor neurones are growing at such an extraordinary speed that he soon gives selective regard to the human face. He probably senses it as a pleasant bobbing blotch, suspended but not localized in space, interesting but undefined. He is still quite unsophisticated as to time and space, quite indiscriminating as to present and past, near and far. His present experiences are so discontinuous that it can scarcely be said that he lives in the present; for there is no present if there is no past or future.

Perceptions of time and space values are so complex that it will literally take the child years to perfect them. Just as his time experiences are at first discontinuous, so his appreciations of space are at first discontinuous; he senses merely the immediate space in which he is immersed; he does not sense its context. He is unaware of distance and depth. For

him the visible world is a flat screen or a kaleidoscopic succession of flat screens. Not until he is about nine months old does he begin to probe into the beyond and the beneath. Slowly the relationship of container and contained dawns upon him. At that time he begins to thrust his fist intentfully into the hollow of an empty (or full!) cup. At that time also he extends his index finger to poke and to pry. This is the way in which he "discovers" the third dimension. Immediate space loses its flatness; it takes on the perspectives of depth, hollow, solid. Through ceaseless manipulation of objects he penetrates further into the topography and the solid geometry of space,—the relationship of *in* and *out*, *on* and *under*, *in front of*, *behind*, *beside*. Through his tireless locomotion, creeping, walking and running, he builds up a sense of *here* and *over there*, of *near* and *far*, of *wall* and *corner*, of *indoors* and *outdoors*. He masters these elements of domestic geography through muscular experience. The sheer processes of development thrust him deeper into the manifold sectors of space.

His conquest of formed space follows natural sequences which are based on the developmental changes of his nervous system. Note what he does with a crayon. At 2 years he makes a vertical stroke (imitatively); the horizontal stroke comes a little later. Later comes the combination of these strokes into a cross and into a square. Still later comes the oblique stroke. An oblique stroke seems quite simple from the standpoint of motor coordination, but it is something so different that it requires many months of additional neuron growth. We do not expect a child to draw a diamond until the age of 6 or 7 years. All of which goes to show how extremely complex are our perceptions and judgments of configured space. The abstract notions of space come still later. They are products of long and almost tedious growth.

The young child comprehends *under-the-bed*, before he comprehends *under-the-chair*; and he is no longer a young child when he comprehends underness in the abstract. At first the relationships are concrete and specific, not general. Only by slow degrees does he master such place and position words as "up", "down", "where", "go-away", "wall", "corner",

"across the room", "across the street". As late as 30 months, a bright girl may think (ostrich-like) that she is hidden when she covers her face with her hands; and at the same age a boy's solid geometry may be so defective that he puts both of two legs into one pant leg! The spatial complexities of the game of hide and seek must wait until three or four years. The growth of the child mind is rapid in its general advance; slow in its minuter anatomy.

The sense of time undergoes the same gradualness of development. The psychology and the mathematics of time and space are interdependent. An aviator's sense of time may change when he reaches an altitude of six miles. Infants and young children are subject to the same accordion-like relativity of time and space. When a child is 18 months old he begins to grasp the meaning of "now". Not until he is 2 years old or older does he comprehend "soon". He is learning to "wait". There is little use in telling younger children to wait, in order to delay their reactions. But after the age of two, many children can and do delay when you say "Pretty soon". This shows, incidentally, that the appreciation of time and time words is dependent on motor capacity and motor self-control. The 3 year old begins to use the significant word "when", the temporal equivalent of the word "where". His sense of time has so matured that he uses the word itself, saying "Is it time for orange juice?" He also uses the word "today". He understands when you say "not today". Somewhat later he uses the word "tomorrow". "Yesterday" comes later still. When he says "last night" he usually means anything which happened the previous day or even earlier. Time words, like "morning", "afternoon", "Tuesday", "week", "two o'clock", "year" emerge in the child's speech as he matures. They come in a more or less lawful developmental sequence. They are used in concrete situations long before they are used as abstract notions. At first they are applied on the correct occasions, but without accuracy. There is much dramatic pretense of telling time from a toy wrist watch at four years of age; but a child may be 6 years old before he can make a discriminating verbal distinction between morning and afternoon. Concepts of time (duration) are more difficult develop-

mentally than concepts of space (size). The 4 year old, for example, is conscious that he is "bigger" than the 3 year old. Later he realizes also that he is "older".

The sense of number shows the same slow advance as the sense of time. A 6 months old child is single-minded when he plays with a block. A 9 months old child can hold and bring together two blocks and give attention to a third. At one year he manipulates several cubes one-by-one in a serial manner which is the motor rudiment of counting. At 2 years he distinguishes between one and many. At 3 years he has a fair command of "two" and is beginning to understand the simple word "both". At 4 years he can count three objects, pointing correctly. At 5 years he counts to ten, pointing correctly. He recites numbers in series before he uses them intelligently.

At 4 years he can name one color, usually red. At 5 years he "knows" his colors. He names red, yellow, blue, green. Color is somewhat more advanced than texture. The varied adjectives which describe textures are acquired earlier: hard, soft, sticky, rough, gooshy, crumbly, smooth, etc., etc. While he is a preschool child his vocabulary grows in a rather orderly manner, keeping pace with the maturity of his experience. Sometimes, of course, his words and his experience are out of step. He uses words, with (to us) amusing inappropriateness; but his malapropisms are temporary; the word is soon suited to the reality. A verbal blunder is like a false move of crayon on paper. It is corrected with improvement of coordination. The child has to learn the meaning of words, by the same slow growth processes which pattern his perceptions of things.

Words also are things,—peculiar things. Whether spoken, written, printed, or communicated by mouth, phone or radio, they are both realities and symbols of realities. They are the expressions of desires and the tools of thought. Many young children believe that they think with their mouths, and there is a grain of truth in this confusion of thought with voice. The preschool mind is not mature enough to make clear distinction between inner and outer, between material and immaterial, cause and effect. "What blows?" A 4 year old child may say "Trees blow". He

thinks that the nodding of the trees stirs the air and makes the wind. At 5 and 6 he is likely to define a word in terms of use. The wind is "to make the clouds come", it is "to push the ships". Ten years later he will give abstract definitions of realities even more intangible than wind:—liberty, evolution, character. Abstract ideas, like concrete judgments, are products of slow, gradual growth.

Time, space, number, form, texture, color and causality,—these are the chief elements in the world of things in which the child must find himself. We have shown that he acquires his command of these elements by slow degrees, first through his muscles of manipulation and locomotion, through eyes, hands, and feet. In this motor experience he lays the foundation for his later judgments and concepts. He does not even count to three until he has learned to pick up and release objects one-by-one with eyes and fingers. Mastery of form, likewise, comes through motor explorations and exploitations. Even the simple relationships of up, down, in, on, under, require a mutual coincidence of maturity and experience. Conceptions of physical causality in the long run are acquired in the same manner. There comes a time when the child asks many questions,—*where, what, why, who, and how* questions, and, incidentally he asks them in this genetic order. They must be answered in words; but the words will not be assimilated unless the child's mental maturity and previous experience give them meaning.

In the rearing and guidance of young children there is a tendency to rely too much on the supposed magic of words. Sometimes the adult thinks, naively enough, that if the word is uttered loudly enough and often enough it will finally penetrate. Words do not penetrate. They only register; and what they register in the child's mind is often grotesquely different from what they were intended to convey. Words, however, have genuine power in the guidance of children when they are skillfully used and adapted to the contents and the tempo of the child's mind. In subsequent chapters we shall point out the kind of speech which the nursery school child and the pre-nursery child can comprehend,—words which register and bring about response and release. Attention

will also be called to the importance of inflections, intonations and timing. All of these can be more effectively adapted to the guidance of the child when the immaturities of his growing mind are understood. In the present chapter we have indicated the basis and nature of these immaturities. The mind is a growing myriad of reaction patterns which mirror the physical world in which the child is reared. It grows not unlike a plant. But the mind is also a person, and as such it mirrors the reaction patterns of a world of persons. In the following chapter we address ourselves to these personal-social patterns.

3

PERSONALITY AND ACCULTURATION

THE baby grows up in a world of things. He also grows up in a world of persons. These two worlds are not, of course, separated from each other. Often they are almost blended. The baby makes less distinction between them than does the adult. Part of his task of development is to achieve an adaptive and progressive differentiation. For the young baby all things are highly personal, and conversely, persons tend to be regarded as things. It takes time for him to mature a sense of his own self as a person, and also a sense of the selves of others, to say nothing about all sorts of distinctions between physical objects, personal possessions, animals, machines, scurrying clouds, floating boats, moving shadows, reflected images, echoes, rising vapor, animate nature, inanimate nature, heavenly bodies, human deeds, rainfall, wind, snowfall, life and death.

As Thoreau so wisely hinted, the baby is part of Nature and at one with her. The baby grows up in a cosmos as well as a culture,—a universe

crowded with impersonal forces and personal agencies. Sometimes these forces and agencies operate with dramatic suddenness, even with violence. More often they operate subtly with concealed but cumulative effect. Somehow the child must find himself in what would be a chaotic welter of stimuli, were he not protected by the ordering forces of his own organic growth. Nature (which is our familiar household name for the cosmos!) intended that he should sustain a certain permanent identity in all the bewildering diversity which surrounds him. Therefore, he has an individual mind: therefore, he becomes a person.

§1. PERSONALITY AS A DYNAMIC STRUCTURE

His mind, as we noted, is an intricate bundle of behavior patterns and behavior potentialities. His personality is the self-same bundle as it functions in a culture. Psychologically speaking, a culture is also an organized body of behavior patterns built up through generations of group experience and mediated by folkways. The infant contributes his mite to this vast cultural complex, because he becomes a focal point for the impacts of culture. As a youth and adult, he both continues and modifies the tradition. The tradition is transmitted by the process of social inheritance, which is only figuratively comparable to the racial inheritance that endows the infant with a nervous system.

This nervous system, as we have shown, in the preceding chapter, is so constructed that it reacts in a patterned and patterning manner to the world of things. It reacts in the same patterning manner to the world of persons,—which is equivalent to saying that personality is subject to the very mechanisms and the laws which govern the growth of perceptions and of intelligence. To be sure the personality reactions are colored by emotions, by feelings of pleasure and pain, by strivings, seekings and avoidances; but all this emotional life is organized and related to patterns of response. Emotions are not free-lance qualities which attach themselves

to behavior patterns; they are part and parcel of the patterns. Emotions grow and mature in the same sense that perceptions, judgments and concepts grow and mature. In sketching how the mind grows, we have already indicated how the personality develops. The child develops as a whole. What we call his personality is an organized and ever-organizing web of behavior patterns,—particularly of personal-social behavior. These patterns constitute and sum up all his reactions to the culture which reared him. They are neither more nor less mysterious than his sensori-motor patterns of posture, locomotion, and manipulation. They have the same geometry of growth which determines the developmental sequences of vertical, horizontal and oblique. Personality is but an abstraction, unless we agree that it is constituted of genuine patterns of behavior which grow and have being in the sense that cube behavior grows and makes itself manifest in lawful towers and bridges. Personality is not a force behind the scenes which operates a puppet. It is the whole puppet show,—player, stage, audience, acts and scenes. It sums up, as we have just noted, all the impacts of culture upon the growing organism, and since the personality is at once a product and instrument of growth, the infant foreshadows the child; the child the youth; the youth the man.

Any realistic approach to the problems of behavior guidance must recognize the personality as a growing tissue which both yields and resists. In later chapters we shall reduce these generalities to concrete formulations and show how the culture, embodied in parent and teacher, must meet the limitations of immaturity. We can scarcely do justice (and courtesy) to the young child unless we perceive the limitations of personal-social behavior in the same light that we perceive his inability to walk at 20 weeks, and his inability to build a tower of cubes at 40 weeks. The degree and the kind of help he needs as a developing personality are constantly changing with the maturity of his behavior equipment. Let us then attempt to take this subject of personality out of the clouds and envisage it in comprehensible patterns of behavior as they emerge. We shall find that personality development is essentially a progressive

finding of the self through reactions to and progressive detachment from other selves.

When and how does the personal life of the infant begin? Not a simple question; for the sense of a personal self is a product of slow growth and the sense of other selves keeps ever changing with advancing maturity. The psychology of the self of a newborn baby must be largely confined to the mass of sensory impressions and feelings which arise from his lungs, his gastro-intestinal tract (many feet in length), his bodily movements, and his enveloping skin which usually fits him quite neatly. The total area of this outer skin and the yet vaster mucous membranes or inner skin is very extensive indeed. His air hungers, his food hungers, his appreciations of warmth, cold, bodily discomfort, and of snugness constitute the core of his psyche. Here is the nucleus, so to speak, of a personal self which grows and elaborates with great rapidity during the first five years of life.

When one thinks how neatly the baby's skin separates him from the impinging universe, one might infer that this dermatological envelope would make a most effective container for a well-defined personality! As a matter of fact this surface so bristles with sensitive receptors that it serves also to merge him with the cosmos in which he is immersed. It takes time, it takes complicated developments of the central nervous system, it takes the distance senses of sight and hearing to disengage him from the contexts to which he is so closely united.

In the beginning he is all universality, or all ego, as you choose. In a few weeks he "sees" a "face" hovering over him. This experience is not a personalized perception of a personal face, but it contains the germ of a sense of *someone else*. In due time through sheer association combined with more matured perceptual power this face will become identified with food, play, and ministering care. It will take many months before that face is apprehended in its true features and in its relationships to head, neck, arms as parts of a personal physique. Even the perception of the physical aspect of other persons takes shape by sketchy stages; analogous to the stages by which the preschool child with a crayon pro-

gressively portrays the human form,—first a central mass, from which spring eyes and ambiguous appendages; later head, eyes, nose, mouth, torso, arms, legs, fingers. Development is always a process of progressive differentiation. As the infant matures, his discernment of the anatomy of other persons becomes increasingly particularized. At the same time he learns to interpret the meaning of the nodding face, of the beaming eyes, the smiling mouth, the approaching hands, the glistening bottle, the cup, the spoon, the bib, the bonnet. Somehow or other the experience of these meanings, through the alchemy of growth, becomes organized into a complex of emotional reactions, which at last is sufficiently elaborate to be called a sense of another self. In its early stages this sense is so uncritical and so piecemeal that little distinction is made between a face, a false face, a parent, a nurse, a visitor, a mirror image. The baby smiles more or less indiscriminately at all of these varied stimuli; but by the middle of the first year he begins to distinguish between a familiar person and a stranger; between a frowning and an approving face. His extraordinary ability to read facial expressions is an impressive developmental phenomenon. He distinguishes delicate variations in posture, gesture, and countenance long before he is capable of fine finger coordinations. Sensitivity to the posturings of facial features and to the postural attitudes of other persons lies at the very basis of his acculturation.

§2. THE WORLD OF PERSONS

THIS sensitivity to cultural impress is so great that he acquires a sense of other selves before he acquires a clear sense of his own self. To be sure there is a mutual interaction here; and one may say that his sense of other selves is really an extension or projection of his private self. Even so his perception of other persons is at times in advance of the perception of himself. He is aware of the incoming and outgoing hand of his mother before he becomes acquainted with his own hand as it travels in and out of his field of vision. He spends many moments looking at his hands,

fingering his hands, mouthing his hands. These sensory experiences,—visual, tactile, wet, dry, still, moving, stop-go, oral, palmar, touching and being touched, provide him with a medley of data. By gradual degrees he comes to realize that he has a hand which feels when it contacts (active touch), which feels when it is contacted (passive touch), which feels when it moves (sense of motion, or kinesthetic sense mediated by sensory end organs in muscles, joints, and tendons). His ceaseless manipulation, therefore, acquaints him not only with the physical universe and the physical presence of other persons, but with the physical presence of himself.

His mouth as well as his hands serves as an avenue for information. He is under an irrepressible impulse to put “everything” into his mouth, including his own hands, feet, nipple, toys, and food. He learns to distinguish between food and non-food. Every feeding whether by breast, bottle, spoon, by cup, by hand, or otherwise makes a contribution to a growing sense of self and of security. His manipulation of objects also gives him an increasing sense of mastery of his environment. The sense of mastery and the sense of self are more or less ambiguous; because at first he makes little discrimination between himself, on the one hand, and the personal and impersonal features of his environment on the other hand.

Likewise he makes no distinction in the beginning between his own voice and that of others. He probably hears his mother’s voice before he identifies his own vocalizations as his own. Sometimes he seems to be startled by sound of his own making; but through his spontaneous vocalizations and through his inveterate banging of objects he comes in time to realize that he is a creator of sound. This again adds to his sense of mastery of his environment. This serves to make him feel himself a person. The culture helps out by repeating the vocalizations he makes and by making other vocalizations for him to repeat. Through nursery games a shuttlecock communication is set up. Pat-a-cake and peek-a-boo are vivid condensations of the mechanism of acculturation which operates similarly though less dramatically throughout the infant’s behavior day.

Through the interchange of back and forth play the infant becomes more aware of himself and others. He sees how his actions can be attuned to those of others. A ball is rolled to him. He anticipates the rolling ball. He receives; he reciprocates; he anticipates; he receives again and reciprocates again. It is more than a mere game; for it represents a mode of acculturation. Countless life situations day in and day out call for similar reciprocities. Through these situations the emotions are organized into patterns which correlate with cultural patterns. We can see now why a child who is understimulated in an over-simplified home lacks the patterns of personal-social response which are the substance of personality. The institutionalized baby suffers grievously in personality make-up because he was deprived of the fundamental reciprocities of household living, which build up, that is, make up the structure of personality. A personality cannot take root and cannot flourish except through interpersonal relationships. The psychological impoverishment of the institutional infant convincingly reveals the nature of the acculturation which takes place in the well ordered home. Such a home gives the infant an opportunity to find himself.

Thus bit by bit, pattern by pattern, the personality of the young child takes on structure and design. It is constituted of an infinitude of patterns and attitudes. It is not some mysterious essence which takes hold of the culture and manipulates it to suit some dark subconscious goals. The personality of the young child is more like an organism which is shaped by what it feeds upon. Nature protects this growing organism normally from over-growth. A balance must be struck between self-effacement under cultural pressure and self-assertion under the compulsion of developmental urges.

§3. THE GROWTH OF PERSONALITY

AND so in a tolerant culture the infant one-year-old already has an opportunity to assert his personality. The household obligingly laughs at his performances. He enjoys an audience and delights in repeating performances laughed at. Thus he both acquires and exercises his growing consciousness of self. At this genial age, he also proffers a toy to an outstretched hand and surrenders it with his newly acquired power of prehensory release. This responsive release, of course, has a certain social significance. But Nature cannot carry socialization too far and so at 15 months the child seems to be more demanding, more self-assertive. He may even inhibit release of the toy because he wishes to satisfy his sense of possession.

He also seems to have a high degree of self-dependence at the age of 18 months. He is so engrossed in his run-about activities that he scarcely avoids bumping into other run-about children in his path. He scarcely perceives them as persons like himself, or he would not pinch and pull and stroke them as though they were inanimate objects for manipulation. Nevertheless, such manipulation is increasing his knowledge of the constitution of other persons. He also increases his knowledge by doing a great deal of watching of the social scene. Time after time during the day he interrupts his activity for absorbed inspection of the activities of others. He may lapse into dramatic imitation of activities of his elders. He seizes a broom to sweep the floor just as his mother does.

The 2 year old is an infant-child; but he is more mature than the 18 months run-about. He has a rudimentary sense of ownership; he holds onto possessions,—even hides them. He fights for them (something, of course, which grown-ups never do!). But, no matter, if he has to learn to share, he must first learn *it's mine!* Crawling comes before creeping—backward crawl before forward. The gentler side of his nature is shown in his interest in dolls and babies. Even the boys indulge in doll play.

The 2½ year old has a bad reputation for contrariness and for going to

contradictory extremes. In the development of creeping there is a stage when the infant goes neither forward nor backward, so he starts both ways in alternation: he rocks back and forth, supporting himself on hands and knees. The 2½ year old is in a similar two-way rocking stage with respect to his social behavior. He cannot make a single choice, so he makes two,—two contradictory choices; he oscillates between two opposites. There are no one-way streets for him. But, do not despair. He is learning to shift gears. He will forge ahead. Soon he will be a delightful, enjoyable 3 year old.

THREE is a kind of coming-of-age. For one so young, the 3 year old has a high degree of self control. He has himself well in hand. What is more, he likes to please and to conform. "Do it dis way?" is a characteristic question, which shows that he is sensitive to the demands of culture. You can bargain with THREE and he can wait his turn.

FOUR is not quite as docile as THREE. FOUR (and half past) tends to go out of bounds. He is a little dogmatic and self-assertive,—something of a sophomore; a little self-centered; but he likes to dress up and to dramatize and thereby he becomes acculturated.

FIVE is a SUPER-THREE with a socialized pride in clothes and accomplishments, a lover of praise. He is a self-assured, conforming citizen in his kindergarten world. If the development of his personality has been well-balanced and well-timed, he has overcome much of the impulsiveness and naiveté of early infancy. He enters upon higher levels of organization during the elementary school years and keeps advancing during the period of adolescence. If his mental growth is healthy, he integrates and consolidates his achievements as he ascends from one level of maturity to another.

The process of maturing remains essentially the same throughout the whole life cycle. It is a process of developmental morphogenesis. It is a constant building up and interweaving of an infinitude of patterns and sub-patterns, always subject to the mechanisms of developmental physi-

ology. These mechanisms are so lawful and so fundamental that children of similar chronological age are in general most comparable with respect to their emotional characteristics. The intellectual prodigy capable of fifth grade work at the age of six is at heart more like a child of six than a child of eleven. This fact suggests that the make-up of personality depends upon instinctive and innate factors which are so ancient and deep-seated that they cannot with impunity be transcended, even in a highly sophisticated culture.

The foregoing text of this chapter has not attempted to penetrate far into the private world of the child's emotions. These emotions we must infer on the basis of his outward behavior and the historical development of his individuality. We wish to avoid the suggestion that the personality of infant and child is a product of emotions which operate in some mysterious way through the subconscious or otherwise. We should prefer to think of personality in less mysterious and more realistic terms as a structured end product of the child's developmental past. As such, it bears the imprint of the patterns of the culture in which he was born and reared. The early impression of the family life during the first five years leaves the most fundamental and enduring imprint. Acculturation begins in the home and the influence of the larger social groups is limited by the trends initiated through the family. If the child grew up in a natural and not in a social world, he would still be able to achieve some of the fundamental adjustments to life. He would be able to adapt to the world of time and space, the world of things, but he would be almost devoid of personality because personality is constituted of an infinite number of reactions which are released in a socialized world.

Personality is a word to conjure with. In the present chapter, we have, however, deliberately avoided a conjuring discussion of the more speculative and inaccessible aspects of the subject. Our purpose has been to emphasize the central fact that personality is a product of growth, that it is a structured entity which varies enormously with the maturity of the child. It is impossible to describe even in general terms the personality of "the infant" or the personality of "the child". Personality as a living

actuality changes so much with age, that a whole series of delineations is necessary to depict the pathways and patterns of its development.

These delineations have been assembled in PART TWO, (Chapters 9-20) where twelve age levels are separately treated. The psychological features of each age level are outlined in a *Behavior Profile*. This profile sketches the personality characteristics of a typical child of a given maturity. How these characteristics function in our culture is further indicated by a summary of the *Behavior Day* of such a child. The behavior day indicates suggestively how a child of a given age distributes his energies and interests in the course of twenty-four hours. When this child reaches the age of 18 months he is also called upon to make adjustments to cultural groups outside of the home. How his "personality" accomplishes these adjustments at advancing ages is concretely described under the headings *Nursery Behavior* and *Cultural and Creative Behavior*. Also under the heading *Behavior Day* and the additional heading *Nursery Techniques*, there are specific statements and suggestive hints of how the personal-social behavior of the child is managed and directed both at home and at school, under the actual conditions of modern life. It is believed that such practical particulars will give a more authentic picture of *personality* than could be derived from an abstract discussion of personality forces.

It is, of course, recognized that there are great individual differences in any age group, but these differences cannot be adequately estimated or understood except in terms of relative maturity. The series of *Behavior Profiles*, therefore, provides a frame of reference for envisaging the growth of personality.

4

INFANTS ARE INDIVIDUALS

INFANTS are individuals. They are individuals from the moment of birth. Indeed, many of their individual characteristics are laid down long before birth. In the shape of his physique the newborn infant already gives tokens of what he is to be. Physical measurements may show which of three body types he will most closely approximate as an adult: (1) round, soft body, short neck, small hands and feet; (2) square, firm body with rugged muscles; (3) spindly body, delicate in construction. Individual differences in physique are due to variations and mixtures of these bodily characteristics.

There is a similar variety in temperaments, corresponding to differences in physique, and in biochemical and physiological peculiarities. Three traits or types of temperament have been distinguished. They combine in varying degrees in different individuals: viscerotonic, somatonic, and cerebrotonic (Sheldon). The extreme viscerotonic has a good

digestive tract. He is good-natured, relaxed, sociable, communicative. The pronounced somatotonic is active, energetic, assertive, noisy and aggressive. The fragile cerebrotonic is restrained, inhibited, tense; he may prefer solitude to noise and company. He is sensitive and likely to have allergies.

§1. MATURATION AND ACCULTURATION

SUCH classifications are much too simple to do justice to the infinite diversity of human individualities; but they serve to remind us that there are primary individual differences more basic than the differences acquired through acculturation. In the hey-day of Behaviorism there was a popular impression that all babies are very much alike at birth, and that the differences which become apparent as they mature are due to conditioned reflexes. The child's mind was said to consist of a complex bundle of conditioned reflexes, derived from environmental stimuli. According to this point of view, children resemble each other most while they are infants,—the younger, the more alike.

There is no evidence, however, that infants are not individuals to the same degree that adults are individuals. Long range studies made in our clinic have demonstrated that such traits as social responsiveness, readiness of smiling, self-dependence and motor agility tend to manifest themselves early and to persist under varying environmental conditions. Every child is born with a *naturel* which colors and structures his experiences. The infant, to be sure, has great plasticity, great powers of learning; but there are lawful limits to his conditionability. He has constitutional traits and tendencies, largely inborn, which determine *how*, *what*, and to some extent even *when* he will learn.

These traits are both racial and familial. The racial traits are those which are common to the whole human species. The familial traits are the distinctive endowment which he inherited from his parents and a long line of grandparents. The child comes into this double inheritance

through an innate process of growth which we call *maturation*. He comes into the social "heritage" of culture, through a process of *acculturation*. These two processes interact and interfuse, but the process of maturation is most fundamental,—so fundamental that acculturation can never transcend maturation.

Infants are individuals, because the intrinsic forces of maturation operate to keep them from being the mere pawns of culture. The impacts of culture are incessant and often they tend to produce uniformity, but even the tender infant preserves an individuality, through the inherent mechanisms of maturation. We may be duly thankful for this degree of determinism. Did it not exist, the infant would be a victim of the malleability which behaviorists once ascribed to him. He is durable as well as docile. In a boundlessly complex world he says, in effect, "Lo, I too am here!"

§2. THE INDIVIDUALITY OF TWINS

THE meaning of maturation is beautifully illustrated in the development of twins. Fraternal twins are derived from two separately fertilized egg-cells. Each twin, therefore, has a distinctive hereditary origin and a correspondingly distinctive genetic constitution. Such twins are ordinary brothers and sisters. They show family resemblances but they are essentially unlike, even though they are simultaneously reared in the same household and subject to the selfsame culture.

Identical twins are derived from a single egg-cell, and they may indeed be almost identical because they share one and the same genetic constitution. Accordingly they show thoroughgoing correspondences in their physical and mental developments. As Shakespeare, father of twins, put it, "The apple cleft in two is not more twin than these two creatures." One-egg twins may weigh alike to an ounce; their finger and palm prints resemble each other minutely; similarities may extend even to the microscopic structure of the hairs on their heads and to the biochemistry of the

body fluids. Simultaneously they may have the same diseases and almost in lock step reach the same stages of maturity in their patterns of behavior. In physique, in temperament, and behavior, they may be virtually indistinguishable.

We have studied such a highly identical pair of twins at the Yale Clinic of Child Development, over a period of 14 years. By repeated physical and mental measurements, by systematic motion picture records of behavior and experimental observations using the method of co-twin control, we have followed the life careers of these twin girls from infancy to adolescence. In the co-twin control studies, we trained one twin (T) and reserved the other twin (C) as a comparative control, to determine the effects of intensive training in such sample functions as stair-climbing, block-building, vocabulary, and manual coordination. These effects proved to be relatively impermanent: the untrained twin attained the equivalent skill as soon as she reached the requisite maturity. Numerous tests at advancing ages revealed an amazing parallelism in their physical and mental growth.

But on close analysis even this remarkably similar pair of twins presented consistent individual differences, many of which could be traced back to infancy. The differences are slight but they are durable. Here are some of them: T is quicker, more direct, more decisive: C is more deliberate, more inclusive, more relaxed. T is a bit brighter: but C is more sociable, more communicative. T shows a predilection for straight and angular lines in her drawings of a house, of smoke, of curtains, and of string balloons. C favors curves. Her curtains are flounced, her smoke curls. In attentional characteristics, T's pick-up is more prompt, she focalizes more sharply, is more alert for details. C's attention is more generally alert, more imaginative, more roving. These differences are slight in degree; but, they are permanent, in the perspective of 14 years. They are permanent because they are constitutional. In terms of temperament, Infant T was somewhat more cerebrotonic. Infant C was somewhat more viscerotonic.

Infants are individuals. When human behavior is organized in a cul-

tural milieu, there is almost an infinitude of available environments; the organism selects from this infinitude in much the same way that a living cell may or may not select potassium from a fluid medium. The structure of the organism, whether conceived in terms of biophysical waves or particles of stereo-chemistry, is attuned to what it selects and averse to what it rejects. For this reason it has proved difficult to find *pure* cultural factors to explain the demonstrated differences in the life careers of Twin T and Twin C. Twins are individuals.

§3. THE INDIVIDUALITY OF GROWTH PATTERNS

THE most fundamental ability is the ability to grow: It is the most fundamental because it includes all other abilities. For the same reason the most important index and symptom of a child's individuality is his *mode of growth*. No two children are exactly alike, but no two (not even Twins T and C!) grow up in just the same way. Every child has a distinctive style or method of growth. The most penetrating question which one can ask about an individual is, "How does he grow?" "How does he learn?" "How does he advance from stage to stage as he matures?" "How did he solve the problems of development as a baby?" These questions are really one. They all bear on the essence of individuality. They concern the growth characteristics which determine the course of personality patterning in relation to patterns of culture.

Growth characteristics in turn must determine the techniques and procedures of child guidance. PARTS TWO and THREE of this volume deal concretely with the growth trends which shape the organization of behavior at ascending age levels. Description, theory, and practice are approached from the standpoint of development. Guidance and hygiene are discussed in terms of maturity. The concept of maturity with all its relativities is the key to an understanding of the individual infant and child.

Temperament and growth type are closely related phenomena. Each

represents the characteristic manner in which an individual reacts to life situations. Growth type is particularly significant because it expresses the long range individual way in which the organism handles the continuous task of achieving maturity. Some children, to use an antique word, are more "growthsome" than others. But they differ yet more profoundly in their styles of growth.

These varied styles are manifested in emotional characteristics, in motor demeanors, in reactions to novelty, success and failure, in dependence upon environment and persons. Consider Children A, B, and C as illustrations of three different modes of development and of self adjustment.

Child A matures slowly: *Child B* rapidly: *Child C* irregularly.

A approaches new situation cautiously and warily: *B* is incautious and cool: *C* is variably overcautious and undercautious.

A is wise with respect to life situations: *B* is bright and clever: *C* is brilliant.

A is equable: *B* is blithe: *C* is moody.

A achieves orientation in total time and space: *B* is oriented to present time and immediate space: *C* is mixed and confused, while achieving orientation.

A takes in the whole and works in from the periphery: *B* operates more in the immediate context: *C* takes in either too much or too little and holds on too long.

A adjusts and shifts focus: *B* is in relatively continuous focus: *C* is well in focus or far out of focus.

A can wait and bide his time: *B* is up and at it, does not need to wait: *C* does not know how to wait and is poor at timing.

A assimilates gradually: *B* combines and adapts expeditiously: *C* overcombines and dissociates poorly.

The foregoing traits are dynamic traits; therefore, they have wide and general applications. They come into expression at all ages from infancy to adolescence and adulthood. They apply to all significant life situations, those of the home as well as community, — to the routines of feed-

ing and everyday living in the nursery. They involve the vegetative as well as the sensori-motor and symbolic nervous systems.

The traits, as listed, were not derived from an academic classification, but are based on observations of infants and young children in clinic and nursery school. Even in their present form they may be used as touchstones to appraise the kind of child one is dealing with. It is not possible to diagnose constitutional traits simply by observing occasional behavior patterns. But by watching over a period of weeks, months, and years, the manner in which a child solves the endless succession of growth problems, it is possible to become acquainted with very significant aspects of the psychic constitution. The constant task of teacher and parent is to notice how the growing child achieves his adjustments. Only in this way can we understand his individuality.

The A, B, C, traits represent variations in the make-up of the "biological individual" but they also have significance for the "cultural individual." They determine to what extent the child is susceptible or immune to the stimulations of the cultural environment. By implication they even suggest adjustments which the culture must make in behalf of these individual differences in modes of growth and learning. The various traits overlap and do not fall into neat compartments. However, the A traits all tend to go together, and in the most typical cases are represented in one and the same individual. This is true of the B and the C traits also, so that we have, roughly speaking, three major *growth types*: A, B, C, the solid, the facile, and the uneven. Which fact leads to a very interesting conclusion as to the responsibilities of the culture. It is clear that the C type will make the most demands, and require constant adjustments; the B type is much less demanding. The A type asks little from the environment and depends on his own resources. The culture should be alert to offer him somewhat more than he asks for. The B type asks more from the environment; he knows what he wants and is so articulate that the culture does not need so much to foresee and plan. The C type is variably overdemanding and underdemanding. The culture must plan,

foresee, direct, restrict, prod and channelize to bring about mutual accommodations between the individual and his environment.

Between these extremes lie the everyday problems of infant care and child guidance. The beginning of wisdom in the rearing of children is a realistic recognition of the growth factors which shape his conduct, and the acknowledgment that every child has a unique pattern of growth.

5

SELF-REGULATION AND CULTURAL GUIDANCE

IF WE have demonstrated that the infant is indeed an individual, then a very practical question at once arises: How much shall we defer to his individuality? The question cannot be postponed, for every infant from birth has distinctive drives and needs, which must be either ignored, indulged, combatted or controlled. And if they are to be controlled, how can they be reached through the culture; how can they be reached through the child? The very helplessness of the newborn baby, and the obscurity which conceals his individuality make these questions somewhat poignant.

§1. INDIVIDUALS AND SCHEDULES

ONE solution for such perplexities is to "lay down" a fixed feeding schedule and to raise the baby by this schedule. The schedule presumably reflects the wisdom of the race. It is based upon much experience derived from the care of previous generations of babies. It also embodies the cumulative knowledge of the science of nutrition. The physician, as the carrier of this knowledge, lays down or sets up a schedule with a degree of acknowledged authority. The schedule thus becomes at once a symbol and a vehicle of cultural control.

The schedule, therefore, would seem to be the very essence of hygienic science and good will. In actual application, however, the culture often proves to be so inept and the infant proves to be so refractory that conflicts actually ensue between schedule and individual. Difficulties multiply when a hard and fast schedule is rigidly imposed without discrimination on Baby A, Baby B, and Baby C. Veritable contests may occur. The culture, embodied in the parent, insists on feeding at a pre-established hour: the baby insists on sleeping instead; the baby cries when he "should" be asleep; he may even vomit when he "ought" to keep his meal; he may be hungry when he "ought" to be satisfied; he may "refuse" to take solids when he "should," etc. This child-versus-culture conflict is exacerbated when an overwrought parent and an overdetermined physician insist too strongly on schedules and procedures which are not adapted to the infant. It is at this near breaking point of emotional tension that the problem of self-regulation and cultural guidance comes to a genuine issue. And who is to win out,—the schedule or the individual? And who is the wiser,—the household or the baby?

"The Wisdom of the Body",—this is the arresting title of Cannon's well-known volume which discusses the marvellous mechanisms of self-regulation whereby the human body maintains an optimal equilibrium in its chemical constituents and physiological processes. These mechanisms operate with considerable precision even in the newborn baby:

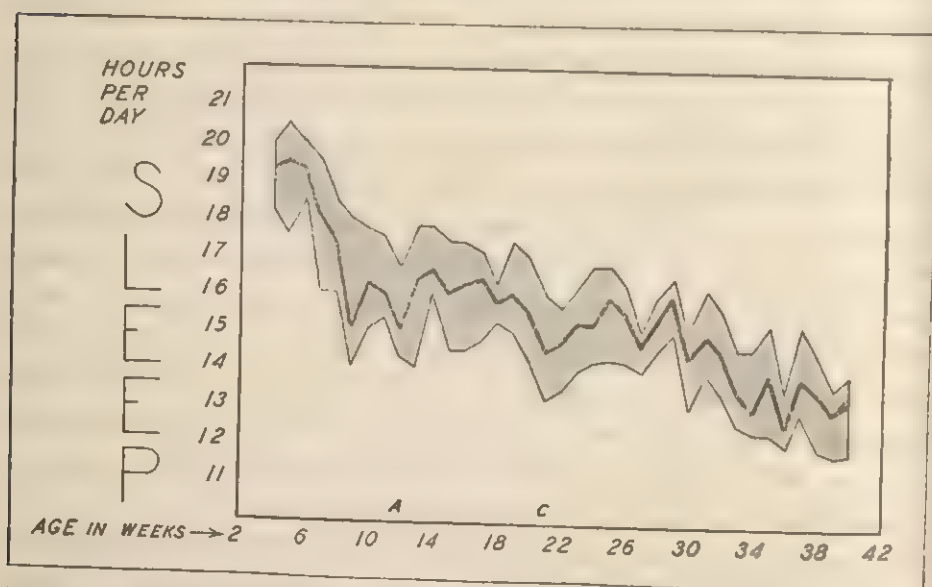
but they do not operate with completed perfection. In many behaviors he is physiologically awkward. He does not know how to sleep, how to wake up, how to keep himself at a steady temperature. In many of these functions he is "learning", he is growing, his body is acquiring more wisdom. But all the time he is preeminently "wise" as to what he *can* not do and what he *should* not do because of the limitations of immaturity.

He is in closer league with Mother Nature than he is with the contemporary culture. There are limits, physiological limits, to his tolerances. He is growing at an extremely rapid rate, and this may add to his difficulties in adjusting to the demands of culture. He is in a somewhat unsettled state of progressive organization and reorganization. He has his ups and downs, his physiological needs seem to vary from day to day; no two days are quite alike, and each month differs from the next. He is under the constant necessity of keeping all his internal organs and body fluids working cooperatively to produce an internal environment favorable for full life and growth. It is not a simple task. He advances as he matures, but not by a straight and narrow path, nor by a simple timetable. *He fluctuates as he advances.* In his wavering he needs help from the culture; he needs discerning guidance rather than rigid regimentation, but fortunately his rapid growth also puts him in possession of new patterns with which to meet the demands of culture.

Self demands and cultural demands must somehow be brought into mutual accord. This can be done only by appreciating the essential wisdom of the baby's body and behavior manifestations. We must respect his *fluctuations* and interpret their meaning. The fluctuations express his developmental needs. The progress of the fluctuations from one week to another affords a clue to his methods of growth and learning. If we chart his naps and sleep periods over several months, we find that the total sleeping time per day varies in almost a rhythmic manner, as shown in the chart of Child J (Figure 1). The extremes of variation within each week are shown for the period from 4 to 40 weeks. The variations go up and down, but the downs in the long run exceed the ups, so that the average amount of diurnal sleep falls from nineteen hours in the fourth

week to thirteen hours in the fortieth week. This is what we mean by self-regulating fluctuations.

Development does not proceed in a straight line, it deviates now up now down, now left now right. Sometimes it even seems to deviate now backwards now forwards; but the total trend is forward. If the deviations and the slips are not too many and too extreme, the organism catches its balance at each step and then makes another step onward. The fluctua-



Daily variations in the amount of sleep of Child J from 4 weeks to 40 weeks of age. The extremes of fluctuation are indicated by the solid band. The average number of hours for a week are shown by a solid line (brief respiratory infections occurred at 12 and 21 weeks).

tions are really not lapses: they are groping "efforts" of the organism to reach a further organization.

The enlightened culture attempts to recognize these efforts, and to go along with them. The child is in league with Nature; but he is also growing into his culture. By reading the cues of the child's organism, culture also comes into closer league with Nature. In this way self demands and cultural demands can be brought into accordance. By registering his

self-demands and by having them met to a judicious degree the individual is able to accomplish a maximum of self-regulation.

§2. SELF-DEMAND SCHEDULES

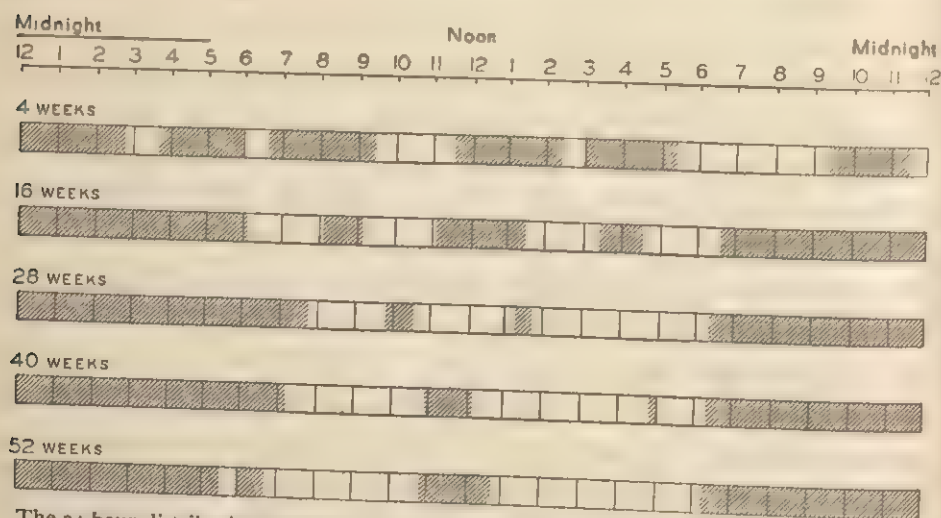
How does an infant register his self-demands? By his behavior. The well-being and the ill-being of his organism are summed up in his patterns of behavior and in the alternations of rest and activity which make up his behavior day. The infant's diary is represented in his behavior day, and as we shall presently see, it is an interesting and significant diary if it is duly recorded and read in perspective.

The infant does not have words at his command, but he has two sets of signs and signals: the negative and the positive; those which express *avoidance and rejection*; and those which express *seeking and acceptance*. The negative signals include crying, fretting, uneasiness, refusal, anxiety. The positive signals include quiescence, relaxation, satiety, cooing, smiling, and pleasurable self-activity. By such behavior language the infant reports his status and his self-demands. He tells us whether and when he is hungry, sleepy, tired, contented, uncomfortable. By taking cognizance of these cues the culture (through the parents) can devise a flexible schedule of care adapted to the infant's needs as they arise. This would be a *self-demand schedule*, as distinguished from an imposed schedule. An inflexible schedule based on a more or less arbitrary norm would ignore the infant's signs and signals. It would insist on regularity of intervals despite the infant's irregular fluctuations. It would regularly insist on waking even when the infant insists on sleeping.

There are two kinds of time,—organic time and clock time. The former is based on the wisdom of the body, the latter on astronomical science and cultural conventions. A self-demand schedule takes its departure from organic time. The infant is fed when he is hungry; he is allowed to sleep when he is sleepy; he is not roused to be fed; he is "changed" if he fusses on being wet; he is granted some social play when he craves it. He

is not made to live by the clock on the wall, but rather by the internal clock of his fluctuating organic needs.

It is a relatively simple matter to initiate such a self-demand schedule, to keep it in operation, and to chart its course from day to day and week to week. The accompanying bar chart (Figure 2) illustrates the method of recording a behavior day. The total length of a single bar represents a 24 hour period from midnight to midnight. The behavior events of the day can be plotted along the course of this time bar. Sleep is indicated by



The 24 hour distribution of sleep and waking time of Infant S at 4, 16, 28, 40, and 52 weeks of age. The records are abstracted from a *behavior day chart* as described in Appendix A.

cross-hatching; waking periods are left blank. Specific events like feeding and elimination may also be included in the record by conventional devices which are illustrated in sections from actual charts as pictured in Appendix A. These charts show how the behavior days of the infant change as he matures. Through self-adjustment and cultural guidance he progressively works out his individual schedule. Even a glance at Figure 2, which consists of excerpts from five different ages, will show a definite trend in the organization of sleep and waking periods in the Behavior Day.

§3. SELF-REGULATION THROUGH CULTURAL CONTROL

THE principle of self-regulatory fluctuations is so fundamental in child development that it has vast cultural implications. The principle applies not only to such "simple" functions as sleeping, eating, and infant play; it applies to the higher forms of learning and of mental organization. The organism during the entire period of active growth is in a state of formative instability combined with a progressive movement toward stability. The so-called growth gains represent consolidations of stability. The opposition between two apparently opposing tendencies results in seesaw fluctuations. Stability and variability co-exist not as contradictory opposites, but as mutual complements. Therefore we must look upon many fluctuations as positive thrusts or efforts toward higher maturity. They may be construed as self-demands, which if adequately satisfied by the culture result in optimal growth of personality organization.

Such is the underlying theory stated in broad terms. This volume conceives cultural guidance in terms of the optimal needs of the individual organism. The cultural pattern must be adapted to the growth pattern, because in final analysis all individual development depends upon intrinsic self-regulation. There is no adjustment to culture other than self-adjustment.

But self-demand is only the beginning of the story of fostering the infant's healthy development. We have seen only too often within recent decades how self-demands may lead to excess. The bewildered parent is shocked when a 4 year old child tells her to "shut up". She has tried hard to have him live by his inner laws; but she comes to realize that he does not live by inner laws alone, for these are of no use to him unless they have come into equilibrium with the laws of the world in which he moves. She may have seen that her child made a good start, but she did not know how to help him finish, how to help him round out his patterns of behavior.

This is why it is so important for the parent to learn the mechanisms of innate and cultural regulation within the first year of the child's life when the patterns are relatively simple. She hears the urgency of the hunger cries of the 4 week old child which can only be controlled with food. She realizes that at 16 to 28 weeks this cry is less frequent and that the child can wait for his feeding. His hunger pains are now less intense, his gastro-intestinal tract is subordinating itself at times to other demands. For now the infant's overflow energy is diverted into active discovery of his own body, his hands, his feet, and also the persons who people his environment. His own inner growth is a controlling and organizing factor.

But this inner ability to wait is specific rather than general. It fails to show itself at the age of 18 months when it is time for juice and crackers. There is a developmental reason for this behavior. The child is acquiring a new control, namely that of demanding food when he sees the table at which the juice and crackers last were served. *Now* is all he knows at this stage of maturity. His mother, realizing the significance of this passing stage of maturity, manages accordingly. She has his mid-morning juice and crackers ready before he sees the table at the expected time. She also knows that she can help him to wait when he is 2½ years old by saying, "Pretty soon". By three years he understands, "When it's time", and by four, he wishes to help in the preparation of a meal. Thus culture in its greater wisdom has led the child steadily onward in relation to his innate readiness to make new adjustments and to curb himself. This is the wisdom of growth guidance as opposed to absolute discipline.

The old and pithy word "curb" harks back to a control that was used in earlier days. The word lives with us in our curbstones. These ancient stones help us in the control of behavior quite as much as do modern traffic lights. But the young child grows only slowly into the realization of what a curbstone means as a limit of safety. His culture having put him in a world of swiftly moving cars, must protect him from dashing out into the street at 18 months. He needs to be harnessed. At two, he not only sees curbstones but has the motor capacity and

balance to walk on them endlessly as long as he has a helping and protecting hand available. It is not until two and a half years that he visually sees and is aware of the danger of a car backing up toward him. At three, he continues to accept his mother's hand as he is crossing a street. At four he is more watchful, more conscious of objects coming from both directions, and longs for the independence of crossing a street absolutely alone. The culture knows that he often overstates his abilities at this age, but responds to his eagerness by allowing him to cross narrow, safe, streets (though not thoroughfares) without holding of hands. By five he is less eager and more self-regulated and accepts the new and helpful control of traffic lights, with his ever watchful eyes. It is now that he is capable of greater independence. Culture recognizes the cue.

If he cannot adjust in this orderly fashion, there may be two possible causes. He may be holding on to earlier modes of adjustment (C-type growth pattern). The culture must then wait and watch knowing that the time will come when his behavior equipment will be ready. Often, however, the child cannot make the final step alone, but needs a lift from the environment at the moment when he is ready to accept the help. The custodians of the culture need to realize that sometimes life becomes too complex and must be greatly simplified in behalf of the child.

Through such mutual accommodations between culture and child, human relationships are improved at all age levels. The "culture" teaches the child, but the child also teaches the "culture",—makes it more intelligently aware of the laws, the frailties, and the potentialities of human nature.

§4. THE CULTURAL SIGNIFICANCE OF SELF-REGULATION

Does this philosophy of self-regulation imply overindulgence or excessive individualism? By no means; for we always conceive of our individual as growing in a democratic culture which makes demands on

individual responsibility. The danger of overindulgence is fictitious, for the goal of self-regulatory guidance is to increase the tensions and the fullness of growth. In the infant the self-demand type of management builds up body stamina and a corresponding organic sense of secureness. The most vital cravings of the infant have to do with food and sleep. These cravings have an individual, organic pattern. They cannot be transformed nor transgressed. Only by individualizing the schedules can we meet these cravings promptly and generously. By meeting them with certainty, we multiply those experiences of satisfied expectation which create a sense of security, a confidence in the lawfulness of the universe.

It is too easy to forget that the infant has a psychology, and that our methods of care affect his mental as well as physical welfare. The individualization of food- sleep- activity schedules is a basic approach to the mental hygiene of infancy. The education of the baby begins with his behavior day.

The mother's specialized education with respect to this particular baby also begins with the selfsame behavior day. The first year of life offers her a golden opportunity to become acquainted with the individual psychology of her child. And what she learns during that first year will be of permanent value, for throughout childhood and adolescence this child is likely to display the same dynamic characteristics which come into transparent view in early life.

The adoption of a self-demand schedule policy creates a favorable atmosphere for the kind of observation which will enable the mother to really learn the basic characteristics of her infant. She escapes the vexation which comes from forcing unwanted food and from waiting for long spells of hunger crying to come to an end. Instead of looking at the clock on the wall, she shifts her interest to the total behavior day of the baby as it records itself on the daily chart. She also notes in what manner and in what direction these days transform as the infant himself transforms. This is a challenge to intelligent perception. Thus she satisfies her instinctive interest in the child's growth and gains increasing insight into the growth process and the growth pattern. It simply comes to this: She

has made the baby (with all his inborn wisdom) a working partner. He helps her to work out an optimal and a flexible schedule suited to his changing needs.

Although this seems very simple, it has profound consequences in the mother's attitudes. Instead of striving for executive efficiency, she aims first of all to be perceptive of and sensitive to the child's behavior. Thus she becomes a true complement to him; alertly responsive to his needs. The child is more than a detached individual who must be taken care of at stated clock intervals. And he is more than a treasured possession. He is a living, growing organism, an individual in his own right to whom the culture must attune itself if his potentialities are to be fully realized.

The first year of life is by no means all-determining, but it is the most favorable of all periods for acquiring the right orientation toward the child's individuality. During this first year one does not use sharp emotional methods of discipline. One comes to understand in what way the child's immaturity must be met and helped. We expect the child to creep before he walks. We do not punish him for creeping. We do not prod him unduly into walking. Growth has its seasons and sequences.

The child must do his own growing. For this reason we should create the most favorable conditions for self-regulation and self-adjustment. But this means neither self-indulgence nor *laissez faire*. The culture intervenes, assists, directs, postpones, encourages and discourages at many turns; but always in relation to the child's behavior equipment and maturity status. When the baby is young we meet his hunger needs promptly. As he grows older he is gradually accustomed to waiting a little longer before his hunger is gratified. He thus acquires increasing hardihood by slow degrees as he is able to bear it. But this method of gradual induction is not possible unless we take fundamental notice of his self-demand cues and shape our guidance on a self-regulatory developmental basis.

This philosophy of child development and of child guidance assumes a democratic type of culture. A totalitarian type of culture would place the first and last premium upon the extrinsic cultural pattern; it would mould the child to this pattern; it would have little patience with self-

demands. Cultural guidance, as outlined in the present volume, is essentially individualized. It begins in earliest infancy. It remains individualized not only in the home, but in the nursery school group and in the larger social world.

6

THE CYCLE OF CHILD DEVELOPMENT

SOME three billion years ago a fiery mass was hurled from the sun. Ever since, this mass which is now our earthly home, has been revolving around its parent sun, and has also been spinning on its own soft axle. Year in, year out; day in, day out.

About a billion years ago the first simple forms of animal life appeared in the waters which bathed the earth. A million years ago, a dawn man walked upon the breast of the earth. A few thousand years ago the descendants of this ancient man began to name the seasons of the yearly cycle and the hours of the daily cycle. Only yesterday did man achieve an insight into his racial ancestry and the origins of his own life cycle.

This life cycle is vastly more complex than the orbits of earth and sun; but like the heavenly bodies the human life cycle is governed by natural laws. In surety and precision the laws of development are comparable to those of gravitation.

§1. STAGES AND AGES

THE life cycle of a child begins with the fertilization of an egg cell. This almost microscopic particle undergoes prodigious developmental transformations. It becomes in swiftly moving sequence a living, palpitating embryo, a fetus, a neonate, an infant, a toddler, a preschool child, a school child, an adolescent, an adult. In a biological sense the life cycle is already nearing completion when the individual is mature enough to produce germinal cells competent to perpetuate the species.

Psychological maturity, however, in a modern culture is a more advanced condition. It might be defined as a stage of personal maturity which is competent to undertake the responsibility of parenthood. This kind of maturity is long in the making. In a more primitive epoch, infants became adults early. Civilization prolongs the period of "infancy" and is itself dependent upon such prolongation.

Development takes time. It is a continuous process. Beginning with conception (the fertilization of the egg-cell) it proceeds stage by stage in orderly sequence. Each stage represents a degree or level of maturity in the cycle of development. To ask how many stages there are in this cycle would be like asking how many moments there are in a day. A stage is simply a passing moment, while development, like time, keeps marching on. This does not, however, prevent us from selecting significant moments in the developmental cycle to mark the progressions toward maturity.

This is one reason why it has become a cultural custom to celebrate birthdays. Each anniversary marks one more revolution around the sun; but it also marks a higher level of maturity. It takes time to mature. We express the amount of time consumed by age. Age differences figure to an extraordinary degree in social practices and legislation. This is the scientific as well as cultural sanction for defining maturity stages in terms of calendar ages.

We recognize, of course, that the factor of individuality is so strong that no two children are exactly alike at a given age. But individual

variations cling closely to a central trend, because the sequences and ground plan of human growth are relatively stable characteristics. Study of hundreds of normal infants and young children has enabled us to ascertain the average age trends of behavior development. We think of behavior in terms of age, and we think of age in terms of behavior. For any selected age it is possible to sketch a portrait which delineates the behavior characteristics typical of the age. A series of such maturity portraits is presented in the *Behavior Profiles* of Chapters 9 to 20.

For the convenience of the reader, twelve age levels are represented in these profiles, namely: 4, 16, 28, 40 weeks; 12, 15, 18 months; 2, 2½, 3, 4, 5 years. The developmental changes which take place in the first five years are so swift and variegated that they cannot be taken in at a single glance. It is necessary to still the moving tide with a cross-sectional view at spaced intervals. And to obtain a consistent conspectus we must choose our intervals with some care.

✓ The rate of child development in the first year is so fast that five age intervals are necessary to do justice to the psychological patterns and needs of the infant. In the second year the transformations are so great, and from a cultural standpoint so important, that special consideration is given to the ages of 15 months and 18 months. In the third year the intermediate age of 30 months proves to be so significant that it needs separate discussion. All told there are twelve advancing stages.

This does not mean that development proceeds in a staircase manner or by installments. It is always fluent and continuous. The stage by stage treatment helps us to make comparisons of adjacent levels and to get a sense of the developmental flow. Without norms of maturity we cannot see the relativities in the patterns of growth. The cycle of child development eludes us unless we manage to envisage the bewildering pageantry of behavior in terms of stages and ages.

The accompanying chart affords a bird's eye view of the scope of early development. The fetal period is included to indicate the continuity of the growth cycle. The organization of behavior begins long before birth, and the general direction of this organization is from head to foot, from

proximal to distal segments. Lips and tongue lead, ears and eye muscles follow, then neck, shoulders, arms, hands, fingers, trunk, legs, feet. The chart reflects this law of developmental direction; it also suggests that various fields of behavior develop conjointly and in close coordination. Four fields are distinguished: (1) *Motor Behavior* (posture, locomotion, prehension, and postural sets). (2) *Adaptive Behavior* (capacity to perceive significant elements in a situation, and to use present and past experience to adapt to new situations). (3) *Language Behavior* (all forms of communications and comprehension by gestures, sounds, words). (4) *Personal-Social Behavior* (personal reactions to other persons and to the social culture). Characteristic behavior in these four fields will be outlined in the behavior profiles, and also in the outlines of nursery behavior, and of the illustrative behavior days.

The first five years in the cycle of child development are the most fundamental and the most formative for the simple but sufficient reason that they come first. Their influence upon the years that follow is incalculable. The trends and sequences of this fundamental development may be summed up tersely:

In the *first quarter* of the *first year*, the infant, having weathered the hazards of the neonatal period, gains control of his twelve oculomotor muscles.

In the *second quarter* (16-28 weeks) he gains command of the muscles which support his head and move his arms. He reaches out for things.

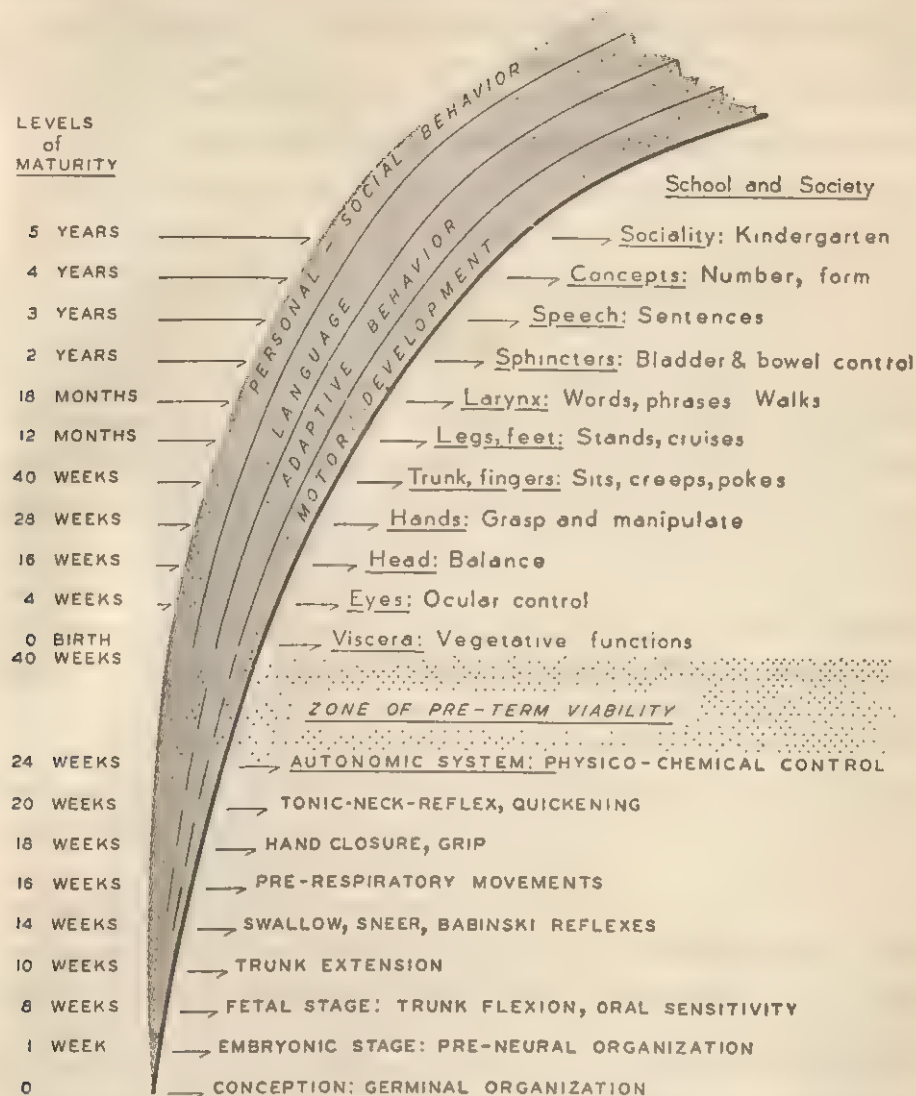
In the *third quarter* (28-40 weeks) he gains command of his trunk and hands. He sits. He grasps, transfers and manipulates objects.

In the *fourth quarter* (40-52 weeks) he extends command to his legs and feet; to his forefingers and thumbs. He pokes and plucks.

By the end of the *second year* he walks and runs; articulates words and phrases; acquires bowel and bladder control; attains a rudimentary sense of personal identity and of personal possession.

At *three years* he speaks in sentences, using words as tools of thought; he shows a positive propensity to understand his environment and to comply with cultural demands. He is no longer a mere infant.

STAGES AND AGES



A diagrammatic representation of the trends and fields of behavior growth from the embryonic period through five years of age.

At four years he asks innumerable questions, perceives analogies, displays an active tendency to conceptualize and generalize. He is nearly self-dependent in routines of home life.

At *five* he is well matured in motor control. He hops and skips. He talks without infantile articulation. He can narrate a long tale. He prefers associative play. He feels socialized pride in clothes and accomplishment. He is a self-assured, conforming citizen in his small world.

§2. PROGRESSIONS IN CULTURAL ACTIVITIES

IN THE beginning the infant seems to be no more than a recipient of cultural impress. He is simply domesticated in a narrow sense to the routines of home care. But in time, domestication broadens into civilization. In this process he takes an active part. Through his self-activities he penetrates into the activities of the larger cultural group.

By the age of 18 months he makes excursions beyond the boundaries of the domestic circle. He may even attend a nursery school on occasion. Each year he makes deeper and more prolonged contacts with the life of the community. He becomes dimly aware of the larger life beyond his roof tree. He widens his acquaintances to include the postman, the grocery boy, the policeman. He makes trips to the doctor's office. In countless ways he thus becomes sensitized to the incentives and cues of the civilization into which he was born, but which he must repossess.

He is no longer merely a child in one family. He sees other parents, other adults, other children. Now what are these other children doing? They are building with blocks. They are painting, they are dancing, marching, they are sculpturing, listening to music, singing, looking at books, bringing things of *their* own to school, playing store, playing hospital, they are doing many things that do not happen just that way at home. Indeed these *other children* are carrying patterns of culture to each other at the very time that they themselves are acquiring the patterns. Here is the soul of the mechanism of acculturation. The most important function of adults in this process is to create the optimal setting in the arrangement of groups and the planning of environmental ap-

paratus. Through sensitization and desensitization to cues in the group life, the child becomes socialized. This is civilization.

There was once a rather attractive theory called the Culture Epoch Theory, which held that the child in his individual development passes through the same cultural stages as the race. He progresses from savagery to barbarism to civilization! Parallelisms were even found between the child's play activities and successive periods of cultural evolution: the root-and-grub stage, hunting and capture, pastoral, agricultural and commercial stages.

Now, of course, such pretty parallelisms can nowhere be found except in the pages of a book. Modern culture presses so closely upon the child that he is scarcely out of his diapers when he begins to press electric buttons and operate radio dials. However, in his back yard sand-box, he will root and dig and build in patterns which are at least reminiscent of primitive levels of workmanship. There is, after all, a grain of truth in the principle of the culture epoch theory, for the modern child does not accumulate culture in a piecemeal manner or by artificial installments. He grows into his culture by the exercise of natural patterns of exploitation and by dramatic enactments through play and imitation. His assimilation of the arts, the folkways, and the technologies of his complicated culture is a developmental process, subject to the same laws of growth which determine his sensori-motor maturity.

In following chapters we shall outline the cultural and creative activities by means of which the modern child makes developmental thrusts into the culture which surrounds him. These thrusts spring from his own spontaneity because by nature he is a creative artist of sorts. Remembering that the infant is, culturally speaking, a novice, we may well be amazed at his resourcefulness, his extraordinary capacity for original activity, inventions, and discovery. Thanks to this workmanship combined with a certain degree of docility, he domesticates himself in and is domesticated by the culture in which he is domiciled!

Civilization cannot be imposed. It must be newly achieved by each generation. Even babies and young children must acquire it in order to

possess it. They acquire it by gradual stages which correspond to the basic sequences of developmental maturity. These stages will be suggestively outlined under the heading Cultural and Creative Activities in Chapters 15 to 19. To emphasize the developmental progression, the various activities will be listed by chronological ages. The outline is merely suggestive. There is a wide range of individual differences in culturability and in native talent.

Society is now learning that such differences in talent have social importance. It is very significant that they show themselves in the preschool period. Some day we shall identify various forms of giftedness in cultural and creative abilities before the child reaches school age. These abilities may show themselves spontaneously in the home, but more often they need the catalytic fillip and the motivational directive of the cultural group,—the neighborhood play group or the nursery school.

In miniature the nursery school represents and anticipates the universal cultural pattern. This pattern, which Wissler has demonstrated is common to all cultures from the most primitive to our own, consists of the following traits: (1) *Speech* (language, writing systems, etc.). (2) *Material Traits* (a. food habits, b. shelter, c. transportation and travel, d. dress, e. utensils, tools, etc., f. weapons, g. occupations and industries). (3) *Art* (carving, painting, drawing, music, etc.). (4) *Mythology and Scientific Knowledge*. (5) *Religious practices* (a. ritualistic forms, b. treatment of the sick, c. treatment of the dead). (6) *Family and Social Systems* (a. the forms of marriage, b. methods of reckoning relationship, c. inheritance, d. social control, e. sports and games). (7) *Property* (real and personal, standards of value and exchange, trade). (8) *Government* (a. political forms, b. judicial and legal procedures). (9) *War*.

Now it is very interesting to analyze the foregoing components of the culture-complex of today and to note the significant degree to which these components enter into the group life of the preschool child. He does not in his own person create or transmit a finished culture, but he is more than a mere dependent within a mature culture. He participates as a genuine member in cultural activities which are within his abilities.

Activities which are beyond him he approaches through dramatic imitations, pictures, and stories. Festivals and rituals take him somewhat into the realm of religion. Government and war are furthest from his ken; but he gets glimpses even of these "essential" activities.

After the child reaches the age of 18 months his cultural and creative activities begin to take on recognizable form in building, painting, modeling, music, pictures and books, dramatic expression, tools, possessiveness and sharing, festivals and celebrations. These various patterns of cultural activity will be listed in PART TWO for the age levels from 18 months through four years. By the age of five, the child has attained a considerable degree of social maturity. Acculturation has proceeded at a fast pace.

The progressions in this acculturation are neatly suggested by the patterns of doll play exhibited by the preschool child at advancing ages. Picture a doll, a doll crib, and a chair in the corner of a nursery school:

18-Month-Old toddles over to the crib, seizes the doll by the leg, drags it out, hugs and lugs it a short distance, drops it on the floor.

2-Year-Old picks up the doll more discriminately and holds its head up; he may even restore it to the crib and pull over the cover to keep the doll warm.

3-Year-Old may dress and undress the doll, seat himself in the chair and say something to the doll.

4-Year-Old dramatizes a complex situation, summons the doctor to the bedside and takes the patient's temperature.

5-Year-Old may make the crib and doll the center of a yet more complex project,—the children's ward of a hospital and may carry the project over imaginatively from one day to the morrow. He no longer lives from moment to moment as he did at 18 months.

§3. THE CYCLE OF THE BEHAVIOR DAY

THE world has been spinning a long time. All organisms from the morning glory to the roosting hen are in some way affected by the diurnal rotation, with its successions of night and day. The daily cycle has had a far-reaching influence in the partitioning and patterning of cultural practices. It has also become ingrained in some measure in the protoplasmic constitution of the human organism. One of the developmental tasks of the baby is to make a working adjustment to this immemorial cycle of 24 hours, reckoning from midnight to midnight.

Every organism, as we have noted in Chapter 5, is a storer and distributor of energy. The problem of infant and parents is to work out by self-regulation and guidance a satisfactory *behavior day* in terms of sleep, naps, feeding, cleansings, and toilettings, dressing and play. The behavior day will be subject to innumerable variations, including temperature, humidity, illness, distractions, and fatigues, to say nothing of the natural fluctuations of growth. Seasons also exert their influence and leave an imprint on the patterning of a whole series of behavior days. But the basic factor which shapes the general pattern of the day is the factor of maturity. For this reason we have sketched for each age level a *sample* behavior day, derived from actual clinical records. *This sample is in no sense a standard or model.* It is, however, from age to age, illustrative of the way in which the baby's daily life changes under the joint influence of maturation and acculturation.

§4. THE USE AND MISUSE OF AGE NORMS

NATURE abhors identities. Variation is the rule. No two children are exactly alike; and it has been said, perhaps with too much intellectual gravity, that there is no such thing as an average child. This has led some skeptics to suggest that age norms are very misleading. Why should we

set up such norms, when not even brothers and sisters grow up in precisely the same way? We shall attempt to answer this question, for the reader has already observed that this volume is built around the concepts of age and maturity.

In the present stage of our scientific culture it would be very awkward to abandon the notion and the fact of age in any treatise on child development. The human life cycle is inextricably bound up with the factors of agedness and of aging. Duration and development are inseparable, metaphysically and also from the incontrovertible standpoint of common sense.

What is almost the first question we ask of ourselves when we are introduced to a baby or to a child? We ask, *How old is he?* If the mother is very proud of his accomplishments she has already told us in advance. In a general way we know what to expect of a given age; and we feel better acquainted with a child when we learn how old he is. There is something strangely mysterious about a foundling whose age is unknown. If a foundling is to be adopted in early infancy, it is extremely important to adjudge his chronological age by whatever age norms are available!

Then there is the story about the very modern boy, not much higher than a table, who wore a pair of horn-rimmed spectacles. A kindly lady leaned over and asked him tactfully, "How old are you, my little boy?" He removed his horn-rimmed spectacles and reflectively wiped them. "My psychological age, madam, is 12 years; my social age is 8 years; my moral age is 10 years; my anatomical and physiological ages are respectively 6 and 7; but I have not been apprised of my chronological age. It is a matter of relative unimportance." Thereupon he restored his horn-rimmed spectacles.

Although this boy has told us a great deal, we shall not feel acquainted with him until he tells us how old he is. We cannot see him in focussed perspective, not knowing his chronological age. Vice versa, we should know very little about him, if we knew only his chronological age. We celebrate the birthdays of a growing child not because the earth has made another revolution, but because the child is progressing toward maturity.

Feet and inches tell us how tall a child is; pounds and ounces how heavy. In somewhat the same way norms of behavior development tell us how mature he is. Norms are standards of reference to which a child can be compared. They must be used with the same judiciousness as norms of height and weight. Although these physical norms represent an average trend, we expect most children to exceed or to fall somewhat short of the specifications. The norms must be applied intelligently, and often only the expert judgment of a physician can determine whether the child is undernourished or malnourished. Intelligent parents have learned that such "standards" must be applied with discretion and caution.

Norms of behavior development, as measures of maturity, must be applied with even greater caution. The lay person should not attempt to make a diagnosis on the basis of such norms. This would constitute a misuse of norms. Refined and responsible application of maturity norms requires clinical skill based on long clinical experience.

Nevertheless the lay person wishes to know how the child mind matures, how the patterns of behavior normally change with age. We cannot appreciate the changing psychology of personality without an understanding of the pathways and patterns of development. The map of child development is so complicated that we can neither orient our observations nor locate our findings without the aid of longitude and latitude. The meridians locate durational time (age); the parallels of latitude locate developmental distance (maturity). For the psychological orientation of the reader we have drawn up a series of behavior profiles for advancing age levels. These are mere thumbnail sketches of maturity; but they are concrete enough to give bearings. And that is their purpose. They do not permit mathematically precise readings; but they do indicate approximate locations. When the profiles are read as a consecutive series, they give a time-flow-map of the way in which a child matures. It is not intended that a single profile should be used to determine whether a given child is bright or dull, good or bad. Individual deviations are almost as normal as they are numerous. The norms enable us to detect the deviations.

The behavior profiles as a series outline the sequences of development. By following this continuity the reader is in a better position to interpret the sequences and patterns of maturity in a growing child. The *mode of growth* is the most important thing to study and to understand.

Babies pass through similar stages of growth, but not on the same time table. Variations are particularly common in postural behavior. For example, we observed five healthy babies, all of whom are now intelligent school children in their teens. At 40 weeks of age, one of these babies was backward in locomotion; one was advanced. The other three were near average. Baby ONE "*swam*" on his stomach without making headway. Baby TWO *crawled*. Baby THREE *creep-crawled*. Baby FOUR *crept on hands and knees*. Baby FIVE *went on all fours*. There were special reasons why Baby ONE was behind schedule in this particular item. Her general development in language, adaptive and personal-social behavior was quite satisfactory. It would have been regrettable if the mother of Baby ONE had worried unduly over this bit of retardation. Likewise the mother of Baby FIVE had no reason to be unduly elated, since the total behavior picture was near average expectation.

From this example it is clear that age norms and normative character sketches always need critical interpretation. They are useful not only in determining whether a child's behavior is near ordinary expectations, but also whether the behavior is well-balanced in the four major fields (motor, adaptive, language, and personal-social). It is especially desirable that there should be no serious deviations in the field of personal-social behavior. If there are extreme defects or deviations in any field of behavior, the advice of the family physician may be sought and a specialist consulted.

The behavior guidance and general management of a child should be based on the maturity level of his personal-social behavior. If the parents, for example, find that their 3 or 4 year old child is consistently functioning like a 2½ year old child, it will work advantageously for the child if his parents are aware of his level of maturity. Naturally, he should be treated as a 2½ year old child and not be held up to 3 year old "standards". At

this age such a degree of retardation will have less serious consequences if his psychological care is determined by his psychological maturity.

The guidance of development must reckon judiciously with norms in one form or another. In final analysis, the child himself is the norm of last resort. We are interested in his growth. From time to time, that is, from age to age, we compare him with his former self; and this gives us an insight into *his* method of growth. This is supremely significant, because that method is the most comprehensive expression of his individuality. Under considerate and wise auspices he is not likely ever to fall below the indications of a former self, because the long-range tendency of growth is toward a maximum realization rather than a decline. This trend toward an optimum is inherent in the self-regulatory mechanisms of growth, particularly when aided by an enlightened culture.

There is also a principle of relativity which should afford us some comfort. It is whimsically stated in two stanzas by John Kendrick Bangs:

I met a little Elfman, once
Down where the lilies blow.
I asked him why he was so small
And why he did not grow.

He slightly frowned, and with his eyes
He looked me through and through.
'I'm quite as big for me', he said,
'As you are big for you.'

PART TWO

THE GROWING CHILD



7

BEFORE THE BABY IS BORN

§ 1. THE FIRST BABY

HUSBAND and wife choose each other, but they cannot choose their children. The parents cannot determine in advance the kind of children who will be born of marriage. That is the great adventure of life. Nature in her wisdom has so contrived it that not even the sex of the child can be pre-determined, much less the temperament, the physique, and the personality characteristics. The newborn infant is an individual in his own right and must be accepted as such.

Indeed, the individuality of the infant is to a significant degree determined before birth; well before the fourth month of gestation the prenatal child has taken on certain fundamental features of the individuality which will become apparent in infancy. Through no process of maternal impression or of wishful thinking is it possible to determine in advance whether this child will be boy or girl, blond or brunet, athletic or retiring; whether he will love the sea better than the mountains.

After the child is born, a parent with an overweening faith in the influences of environment may continue to harbor a preconceived image with excessive determination. In extreme and not too normal instances there is a positive fixation upon a specific type of child. This fixation later impels the mother or father or both to attempt too strongly to make over the child in terms of this image. Matters grow still worse if the father has one ideal and the mother another. Such fixations are detrimental to the developmental welfare of the infant. From the very outset, parents must temper their wishes and school their affections. They must accept the infant for what he is. They should become consistently inquisitive about one permanent question, namely: *What kind of child is he,—what is his true nature?*

This question is shrouded in darkness before birth, but will be ultimately answered in visible patterns of behavior. Even during the prenatal period the behavior characteristics of the future infant are undergoing a preliminary development. So-called quickening is more than a mere index of life. It is the product of a patterned behavior response made possible by the maturing nervous system. The 20 weeks old fetus is already so far advanced in his bodily organization and in the sculpturing of his physiognomy that he is distinctly human in his lineaments, and assumes in the fluid medium of the uterus, postures and attitudes not unlike those which he will display when he lies safely ensconced in his bassinet.

Although the mother's imagery cannot be too precise, the realization that the individuality of the child is in the making puts her in a better position to identify herself during the period of pregnancy with the developmental welfare of the child.

The impending crisis of the first birth is sometimes so magnified that the anxieties and fears of the mother prevent her from building up a natural, constructive outlook. The supervision of the obstetrician may relate itself too much to the birth episode alone. The expectant parents would greatly benefit from a pre-pediatric type of guidance, directed toward the postnatal career of the child. For example, it is probable that breast feeding would be more widely adopted in the interests of the child

if both obstetricians and pediatricians encouraged the mother to nurse the child during his early months.

Such anticipations are especially important in the case of the first born child when the mother has so many new orientations to accomplish. These orientations are physical or biological on the one hand, and cultural on the other. The attitude and expectancies of the mother during the period of gestation, therefore, have far-reaching implications for the early career of the forthcoming child.

The care and management of the child will depend not only upon the practical details of technique, but also upon the philosophy of the parents. The welfare of the child is best safeguarded by a developmental philosophy which respects at every turn the individuality of the child and the relativities of immaturity. The foundations of this philosophy are best laid before the baby is born.

§2. A SECOND BABY

THE first baby makes the greatest demands upon the mother, both physically and psychologically. The second benefits thereby. The parents are now in a better position to see the meaning of birth and of child development in truer perspective. But the very fact that there is another baby already in the picture adds new problems which justify a little frank discussion.

Needless to say the second baby is just as important as the first and just as much an individual. To a certain extent he too must be reared as an only child, entitled to his own distinctive rights. Parents sometimes envisage the second child as a reforming influence, who will be used to mitigate the selfishness and the aggressiveness, perhaps mistakenly ascribed to the first child. If such motives determine the second pregnancy, the home may really not be ready for the newcomer. If the parents are too completely wrapped up in the first child, the second is

likely to suffer in some measure. The stern virtues of impartiality begin even before the second child is born.

Current theories have exaggerated the dangers of a jealousy reaction toward the arrival of a new baby. The result is that parents in their anxiety to forestall such a reaction, go to extreme lengths to build up fortitude and hospitality in the already entrenched first-born. Some of this build-up is nothing short of amusing (in the dispassionate light of what we know about child development). Perhaps a sense of humor can prevent us from going to unnecessary or unwise extremes in getting Junior ready for the New Baby who several months hence will make him a Senior!

To begin with, Junior has a very limited presentiment of events which have not taken place. If he is two years old he has no sense of the future. If he is somewhat older, he may be disappointed and bored by unending references to an event so distant that day after day it is heralded and yet never comes! His age, his temperament, and his maturity should determine how much is told and how it is told. It must be remembered that young children are not adept in thinking in words. They can scarcely be told anything for which they have not had equivalent experience. Or rather, they may be told, but they will not understand. Or they will interpret so literally that their imagery becomes a travesty of the truth you attempt to impart.

A little lesson on seeds and flowers will hardly elucidate the complexities of child-bearing. Even with a bright child such a botanical approach has its hazards as was illustrated by an incident in an Episcopalian Cathedral, when a certain bright preschool child broke the solemn silence of a marriage ceremony by bursting out aloud with the question: "But, Mother, when is he going to put on the pollen!?"

Concrete minded children do not think in analogies. They think in terms of seeds in the stomach. An experimental child may swallow a tomato seed or even a prune pit in order to induce pregnancy. Then there was the girl (or was it a boy?) who swallowed two seeds because the objective was twins!

Such amusing misconceptions should remind us of the limitations of the child's intellect and imagination. His comprehension is dependent upon experience and upon growth which proceeds by slow degrees. It is idle to give him information in advance of his capacity to assimilate. Too much information will actually confuse him, if at the age of four or five he is offered sophisticated ideas and images in the form of words and pictures. His questions are not as profound as they sound. They should be met with casualness rather than ecstasy. Reserve combined with a disarming smile is better than misplaced candor. One need not resort to concealment and old-wives tales; but in general it is wise to respect the child's primitive notions and to give him a minimum response which will satisfy him for the present, and provide him with a nucleus for another advance in his thinking. He cannot be told anything complex at one fell swoop. "To inform the understanding is the work of time." His adjustment to the new baby does not so much depend upon advance information as on a kindly planned protection of his sense of status and prestige.

The planning includes the spacing of children. Many factors bear on this question. One of these is the age of the first born. Usually the 3 year old child is becoming psychologically ready to make a good adjustment to a new baby. He has just come through a stage of reliving his own babyhood emotionally and is well on his way to adjusting to the larger world beyond the home. The 3 year old is ready to go to grandmother's when his mother goes to the hospital. He thinks about the trip almost more than he thinks of the new baby. He may even stay on for an extra two weeks after his mother and the new baby have returned to their home. Frequent postcards hold his contact with his parents. If he stays at home, the mother's voice over the telephone continues a bond, although for some children this makes her absence more difficult.

For the younger child, 12 to 18 months old, special preparations may not register at all. He may not react unfavorably to the mother's hospitalization or the homecoming of the baby, but unwittingly he may be

deprived of many accustomed privileges and even some necessities if the household has not been careful to plan for him in his own right.

The 2 year old child can take part in a simple way in the physical preparations perhaps a month or two before the baby comes. The bassinets, the blankets, the baby powder and doll play help to initiate him into the impending event. At this age, he will probably cleave to his mother as the time for her departure draws near. He may miss her severely during the two weeks when she is in the maternity hospital if he has not become accustomed to a caretaker beforehand. In general, it may be best to have him remain in his own home during this period, for to place him in unfamiliar surroundings might add to the strain of the separation from his mother. The daily homecoming of the father gives support to his sense of security. The 2 year old responds well to some physical token of his mother, such as a scarf or a pocketbook, and wants his repeated query, "Where's Mommy?" answered with the self-same words, such as "Mommy's on Ivy Street in the big house." He may even come to answer his own questions by himself if they are tossed back to him.

It is rather surprising to see how slow is the 3 year old, and even the 4 year old, to notice the enlarging of the mother's abdomen. At 3½ to 4 years he is often very conscious of marked deviations in the symmetry of the body such as an amputated arm or a limping leg. But a slowly changing form before his own eyes does not register. If it is perceived he often gives his own immediate interpretations that his mother has eaten too much breakfast so that her stomach has grown large. He may even try to duplicate her prowess! The wise mother does not impose more knowledge of the coming event than the child has shown himself perceptive of and capable of handling. As with the 2 year old, the orientation of the 3 year old is accomplished through participation in the physical preparations a month or two before the baby arrives.

The 4 year old, and sometimes the 3 year old, is ready for further information and elementary interpretations. In Chapter 23, we shall attempt to outline the steps and developmental stages by which the young child grows into a deepening knowledge of the meaning of birth and babies.

A great fuss is naturally made when the new baby arrives home. This is the critical period which calls for finesse. It is easier for all concerned if the older child, especially the 3 or 4 year old is away from home. Then the mother has a simpler home adjustment to make and can give all of her attention to the newborn infant. After the four week period has been passed, when the mother can again move freely about the house, the return and adjustment of the older child is much easier. At whatever age the older child may be, the first sight of the new baby is the most difficult for him. If initial jealousy does occur, it usually passes rapidly within the first few days. The recurrence of this feeling is most apt to come if the older child (not usually beyond 4 years) sees the new baby nursing at the breast. He should not feel dispossessed. He should participate in the fuss of welcoming and be given simple tasks, such as fetching diapers and administering the bath powder, to afford him a sense of participation. Perhaps much of the fuss should be strategically and ostensibly shifted from the new baby to himself. His prestige should be preserved at all hazards. Indeed, in the happiest households, the prestige of all members is equally safeguarded. When there are two or more children in a family, the most skillful mother plans separately for each individuality.

Whenever a second baby comes into a household, there is danger that we shall try to do too much and consequently overlook the simplest things which are the most important. Explanations have their limitations. The shortest path to the young child is not through the intellect. He is not ready for a preschool course in embryology and obstetrics. There is even some danger in magnifying the role of the physician before the new baby is born. We know of a boy who betrayed unmistakable disappointment as he looked upon the florid face of his newborn brother. In his wisdom, the elder brother exclaimed, "I knew this would happen if you had a *country* doctor!"

We also know of a girl who had been beautifully "prepared" for the new baby, but, alas, was visibly dejected when she saw the new arrival. Why? Because nightly she had prayed for an *older* sister!

8

A GOOD START

WHEN does the baby's mental welfare begin? Before birth. And not, of course, because of the effect of maternal impressions upon the unborn child; but, rather because the mother, even during her pregnancy, is developing attitudes, expectancies, and decisions which will inevitably influence the course of the baby's mental growth, particularly in the four fundamental months which follow birth. It is well to make a good start.

The mental hygiene of the child, therefore, begins with maternity hygiene, and for this reason the obstetrician has a more important role to play than he frequently suspects. Naturally his concern is focused upon the critical event of birth and the preservation of the mother's health in the face of this crisis. But granting this, the expectant mother still turns to him with many questions which have potential importance for her own personal psychology and for the psychological welfare of the expected

child. There are still other questions which she does not formulate at all, but which the obstetrician should formulate for her through his guidance.

§1. BREAST FEEDING AND SELF-REGULATION

FIRST and foremost comes the question of breast feeding. Too often the decision on this crucial question is allowed to drift until a short time before the baby's birth. This dilatoriness has an adverse effect upon the mother's emotional orientation. It also tends to have an adverse effect upon her capacity for lactation. For one thing, the breast and nipples may require regular and systematic attention three months prior to the birth, the anointing and massage of the nipples preventing the cracking which so often interferes with successful breast feeding. This regular attention to the nipples also prepares the mother mentally for the duty of breast feeding, when the time arrives. Perhaps the word "duty" has been misplaced. Our culture in America has shown an increasing tendency to give the mother a choice between nursing and artificial feeding, and often has weighted the choice in favor of the bottle as opposed to the breast.

On the other hand there is the pediatrician who, in cooperation with the obstetrician, judiciously encourages breast feeding in the absence of decisive contra-indications. Certainly the pediatrician's difficulties will be greatly reduced if breast feeding is successfully undertaken during the first four months (to say nothing about mother and baby) .

In the circumnatal period it is natural that there should be cooperation and a certain overlapping in the professional services of obstetrician and pediatrician. In the family physician both services are combined in one person. The obstetrician is concerned with mother,—and child: the pediatrician with child,—and mother. The pediatric responsibility begins, at least technically, with the severance of the umbilical cord. We shall assume that the pediatrician favors breast feeding and that he wishes to avoid excessive adherence to an iron clad clock schedule. This would

set the stage for a self-regulated regime, based on a sensible interpretation of the self-demands of the infant. Breast feeding is the most favorable condition for the initiation of a self-demand schedule.

For two weeks the newborn infant remains in residence in the hospital. Prevailing hospital conventions in our present culture require that the baby should spend nearly all of this fortnight in the nursery dormitory. The nurse is permitted to bring the baby to the mother from time to time and is also permitted to hold him up behind the plate glass for the inspection of admiring visitors, essential or non-essential. Under such hospital auspices the baby is fed according to a fixed schedule laid down by the supervising physician. The sporadic and congregate crying of the babies in the nursery is taken as a matter of course. The individual crying of individual babies is not in general subjected to individual attention. Each baby is fed when the clock indicates that he should be fed.

§2. A ROOMING-IN ARRANGEMENT FOR THE BABY

Now let us assume that we take our point of departure from the internal physiological clock of the infant himself and give regard to his individual cries. We might then suggest a rooming-in arrangement which would bring both bassinet and baby into the mother's room. It is a movable bassinet which may be put in a secluded corner or more intimately at the foot or side of the bed, in accordance with the mother's wishes. For is it not also desirable to place the mother on a reasonable self-demand basis? When her strength permits and when her wishes so dictate it may prove very wise to keep the baby within her vicinity during the course of the day. Naturally after the evening or night feeding the baby will be restored to his dormitory.

This arrangement will actually reduce the amount of manipulation to which the baby is subjected. It simply means that when he cries to be fed, he will be fed. It also means that the baby will benefit from the added

ROOMING-IN ARRANGEMENT

oversight of the mother, during the intervals between feedings. There is no evidence that under proper safeguards such a rooming-in procedure increases the hazard of infection. If anything, the hazard will be reduced because of other attendant advantages.

The presence of the baby gives the mother a profound sense of security. Vague worries and misgivings as to the identity of her baby lose their insistence. She is in a favorable position to build up a sense of relationship with the infant, a sense of familiarity which will fortify her confidence when in the very near future she herself takes over the ministrations and infant care. She is spared the uncertainty which comes from being unable to visualize exactly where her baby is and how he is faring at any given moment, and throughout the many moments of the day. This proximity of mother and child is so natural and can be made so simple that it will dissipate tensions and much of the hospital haste and hurry. The presence of the baby will serve in a salutary way to protect her against an excess of visitors. He sleeps most of the day. The mother keeps a weather eye on the baby. The incidental oversight makes her perceptive of his self-demands. All this increases the advantages of the self-regulatory program of care on which she and the physician have embarked. There is no excessive strain upon the mother. She is within easy reach of a push-button and controls the situation by summoning the nurse whenever she needs help. The rooming-in self-regulatory arrangement is not rigid; it is flexible and can be altered to meet the needs of both mother and child from day to day. It applies to bottle-fed as well as breast-fed babies.

From the standpoint of the infant there are obvious advantages; that is, if we grant that the infant is subject to psychological influences in this early neonatal period. He enjoys more natural and diverse stimulations under rooming-in conditions. His rhythms will not escape notice and he will be spared unnecessary crying. He is in a position to be his natural self. He will communicate his individuality to his mother even in this first fortnight. The more intimate reciprocal relationship between them serves to give the mother more insight into the baby's needs as expressed

in his patterns of behavior. The rooming-in arrangement, however, should be kept flexible. It may be adopted in varying degrees subject to the physician's judgment. In some instances for special reasons it may be unsuitable either for the mother or for the baby.

In any event, the mother's perceptiveness of behavior signs is fostered by a very simple device, namely, the behavior chart previously mentioned (p. 52). Each one of the days which the baby spends in the hospital is recorded by a simple line-a-day method, with a total daily expenditure of less than five minutes. The records will be kept by the nurse, but they are so useful that the mother will wish to continue them after the homecoming. This chart records by figures and conventional signs four major items in the baby's behavior day: namely, *feeding; elimination; sleep; crying*. The entries are made on the basis of a 24-hour cycle from midnight to midnight, as described in Appendix A.

Each entry is made immediately on the spot. The adjacent lines automatically summarize the changes from day to day. The chart itself does not bake us any bread, but it constitutes a helpful diary for the mother and an informative indicator for the physician. If the baby is breast fed, he is weighed prior to each feeding and immediately after each feeding. The difference is the amount of the intake, for the baby is weighed with clothes on.* From the record the pediatrician will always know how much the baby takes at any given feeding. The chart makes such a revealing cumulative record that the mother will wish to continue the daily recordings after she leaves the hospital. The chart in this way serves to bridge the gap between home and hospital.

* At first sight this may seem like a formidable procedure but since the baby's clothes do not need to be removed, the weighing takes very little time and the figures are accurate. Convenience is served if the scales are available in the mother's room.

§3. FROM HOSPITAL TO HOME

AT HOME the mother takes over the recording which she learned from the nurse. Under the rooming-in conditions of the first fortnight at the hospital, she has seen so much of her baby that he is no stranger to her. He looks much less precarious because she has seen his adaptations from day to day. She has seen him dressed and undressed. She has witnessed several baths. This introductory familiarity with the details of infant care stands her in good stead when she is thrown on her own after the homecoming. She may not even need the demonstrating services of a visiting nurse. She will escape the nervousness which so often occurs in the transition to home surroundings. The most comprehensive commendation, therefore, of the rooming-in arrangement is this: it strengthens the bonds between mother and child; it heightens poise and confidence because it achieves a more complete mutual adaptation.

The homelikeness of the rooming-in arrangement at the hospital has made the whole transition to the home less of a crisis. The transition becomes still less of a burden to the mother if the conditions at home at least for another fortnight can be made to approximate the indulgences of the hospital. The mother should not take over increased activities too suddenly. It is a great advantage if she can live on a separate floor or in a somewhat detached part of the house. If possible, the baby should sleep at night in a separate room, as he did in the hospital. Indeed, the rooming-in arrangement of the hospital can be more or less duplicated. Perhaps the father will be in a position to bring the baby to the mother for the night feedings. The domestic policy should be to divide the labors! The home waits on the mother; the mother waits on the child.

The mother's sleep schedule should be adjusted to that of the infant, ample rest being provided to enable her to continue with the breast feeding. Increase of liquid intake is indicated from time to time if there are signs of reduction in lactation. Her interest in continuing the breast

feeding is strengthened by a realization that the breast feeding has a favorable effect upon the post-partum involution of the uterus.

It is remarkable to what extent breast feeding is sensitive to cultural impress. Among many peoples from the most primitive to the highly civilized Swedish, breast feeding is taken for granted as established custom. It is the exceptional mother in these cultural groups who does not nurse her infant.

In America the adoption and duration of breast feeding depends to a surprising degree on more or less fortuitous cultural influences. We know of a pediatrician with a wide metropolitan practice who through sheer exercise of his own professional abilities has induced three-fourths of his maternal clients to adopt breast feeding in preference to bottle feeding. In many other instances this ratio is reversed. The authority and opinions of the physician constitute an important part of the cultural impact. Sometimes it is a lack of accommodation between obstetrician and pediatrician which brings about a premature termination of breast feeding. The obstetrician may stop the nursing early to prevent a breast abscess,—a potential though rare occurrence. This danger may well be lessened if the pediatrician in the interest of the child (as well as mother) recommends nursing at both breasts at each feeding with alternation of the first breast. Positive cooperation between obstetrician and pediatrician favor prolongations of breast feeding. The initiation of breast feeding may even hinge upon the professional solicitude and skill of the physician in charge. He should supervise the very first nursings which are so critical in establishing a successful adjustment to the breast.

Even after breast feeding has been initiated in a lying-in hospital, the mother often resorts to artificial feeding on discharge, influenced, perhaps, by gossip which she has heard on the ward, or by suggestions she has gratuitously received from a nurse, an intern, or a neighbor. The neighbor says, "I nursed my first child, but why bother. I put my second child on a bottle and he got along just as well." The "custom" of breast feeding often hangs upon such slender contingencies in America, which

fact is itself proof that a strong consolidation of both lay and professional opinion might soon make breast feeding much more nearly universal, at least during the first four months.

§4. THE EVOLUTION OF THE BEHAVIOR DAY

THE behavior day chart serves to smooth the transition from hospital to home. The chart helps the mother to a fuller understanding of the child because it both symbolizes and directs her growing insight into the baby's individuality. The lengthening chart will also impart a significant impression of the baby's growth. She will detect in the chart not only the manner in which the baby distributes his daily quota of energy, but also the manner in which he blocks out and consolidates his various behaviors. His staple and significant behaviors consist of the following: Sleeping; Crying; Fussing; "Talking"; Playing; Sense-perceiving; Sleeping; etc. The chart (Appendix A) will show how these behaviors undergo developmental changes from week to week. The changes achieved by the baby give some foretaste of changes yet to accrue in the future. This will have orientational value for the mother during the first four months, giving a sense of perspective just at the time when it is most needed.

These first months are inclined to be somewhat stormy, but the weather will seem much less erratic and take on much more meaning if the child's behavior is not regarded as erratic but is interpreted as an expression of his organic needs and interests. The chart facilitates such interpretation. The baby's most articulate mouthpiece is his crying. Crying is essentially language even though at times it appears to be indulged in for purposes of sheer self-activity. From the standpoint of a self-demand regime the major task of the mother is to be alert to all forms of crying and fussing, to read their meaning and to give as prompt attention as possible. Punctual response to crying in the early weeks reduces the total amount of crying, for if there is a delay in the response there is likely to be a re-

sumption and prolongation of the crying after attention has been given. It is a comfort to realize in advance that ordinarily there is a steady reduction in the frequency and amount of crying. During the first 8 weeks hunger crying is virtually universal. After about 8 weeks the hunger cry tends to diminish in intensity and frequency. The child begins to substitute fussing for crying and he has longer intervals of quiescence because he is becoming interested in various forms of non-feeding behavior. His crying is consequently more intermittent, less sustained.

By the age of 16 weeks his hunger cry may be almost entirely limited to the morning feeding. During the first six weeks he also cries when his diapers are wet or soiled. He may even cry out for this reason during a sleep period. After about the age of 6 weeks he accepts this condition with a nonchalance which may continue to the age of 12 or 15 months, or even later.

At about the age of 4 weeks a new type of cry emerges: the baby shows a tendency to cry prior to sleep. This is not a hunger cry. The cry is a mixture of cause and effect, a symptom of his growing capacity to stay awake. It is a developmental symptom of a thrust toward a higher level of activity. This wakefulness crying tends to occur in the afternoon and evening. It loses its prominence after about the age of 10 or 12 weeks, forsooth because the baby has scaled the higher level. At about this time there is an increasing metamorphosis of crying into fussing and into "talking" vocalization. With advancing age the crying which occurs toward the end of the day is frequently related to a higher order of psychological hungers. The child wishes to exercise his growing sense-perception abilities, to experience color, light, sound, musical notes, singing. He wishes to watch movements; he likes to feel movements too through his kinesthetic sense perception. He may like to be talked to, or even to receive play objects toward the end of the first four months. These new appetites or interests come in small snatches, often punctuated by brief intervals of crying and fussing. The mother is well advised not to over-stimulate the child in response to this type of crying, but inasmuch as it is symptomatic of psychological growth needs, it deserves discriminating consideration.

For similar reasons a little gentle rocking prior to sleep may assuage a fretful cry. While the mother carried her unborn child he was frequently subjected to translations in space. He does not suffer from mild transportations and an occasional jostle after he is born.

With increasing age the child cries less readily on provocation. Whereas in the early weeks a startle was typically followed by a cry, he may by the age of 12 weeks and later, startle without crying. He is building up margins of reserve and margins of exploitive activity. Viewed in perspective his behavior is manifestly becoming more configured, more defined. He terminates meals more decisively by symptoms of positive refusal. His appetite is more clear cut. His demand to be moved from the crib for a brief sojourn on the couch may become so clearly defined to a perceptive mother that he could not express it better if he had a vocabulary of spoken words.

His behavior becomes relatively so effectively defined that there may be a temptation to feed him solids even as early as 12 or 16 weeks. Such a premature attempt to introduce solids during the first four months sometimes invites regrettable results. The baby's neuro-muscular system is not mature enough to handle solids competently. His tongue projection and lip constriction patterns are so dominant that they interfere with normal swallowing mechanisms. Moreover, if supplementary food is added too early the mother's milk balance is upset. A premature administration of solids may result either in marked reduction or over-production of the mother's milk supply, for the baby consumes less at the breast. Not until about the age of 20 weeks is he likely to be mature and interested enough to handle solids acceptably. Fortunately at this period the mother is capable of maintaining an adequate milk supply over a full 12-hour interval without the stimulus of the infant's nursing. This circumstance permits the introduction of solids without prejudicing continued breast feeding and also gives more freedom to the mother. Breast feeding continues to be advantageous both to mother and child for a few months more. It is especially advantageous if the child persists in demanding an early morning feeding.

The expanding behavior chart builds up a perspective which reaches into the future as well as the past. This sense of perspective is further increased when the mother is informed in advance that her child at 16 weeks is very likely to show well defined behavior patterns. But she should understand that the trend toward focused and defined behavior is not altogether smooth and even,—the baby has “bad” days as well as “good” days. And paradoxically enough, from the standpoint of development the “bad” days may be his best days because they are days of high tension in which he is making a thrust (as previously suggested) into a more advanced sphere of behavior. These are the high tension days when his crying is not so much expressive of a frustration as of “thrustation”! The pendulum is swinging to a new extreme. He is wriggling upward. He may briefly display a behavior pattern which will not become part of his established equipment until several weeks later. After a high tension episode or a high tension day he may revert to a lower level of apparently vegetative functioning which on the surface seems like a “good” day.

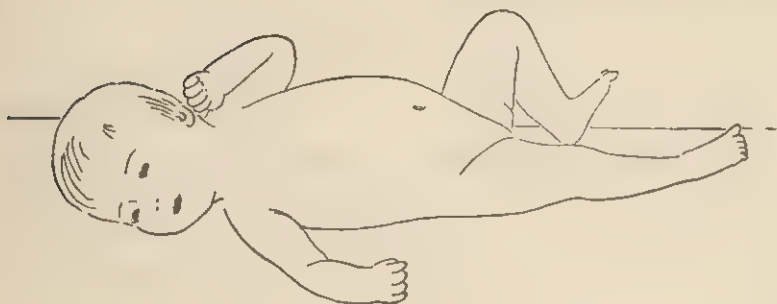
Actually both types of days have their justification in the economy of development. Development proceeds consistently toward a distant goal but it fluctuates from day to day while advancing toward that goal. It is therefore not surprising to find that after the baby has consolidated many of his abilities at the end of four months, he will begin in another month or two again to show perturbances and irregularities reminiscent of the first four months. Nevertheless the trend of normal development is always toward increasing organization and consolidation. Realization of this trend has practical value because it gives the mother a sense of proportion. Things are not as bad as they seem. Patience does not cease to be a virtue; for the higher order of abilities cannot be hastened. Everything in season. “Time bringeth all things.”

In the following chapters we shall try to outline in an orderly manner the behavior traits and the behavior trends which Time brings to the growing infant. We have already emphasized that Time travels in divers paces with divers persons. No two infants develop in precisely the same

manner at precisely the same pace in every detail. But the ladder of maturity is made of rungs. The following series of behavior profiles is simply intended to show *in a general and approximate way* how a somewhat typical child, as a representative of his species and his culture, mounts the tall ladder with rungs placed at advancing ages. First we delineate the baby four-weeks-old.

9

FOUR WEEKS OLD



§1. BEHAVIOR PROFILE

WHAT is the mind of the 4 week old baby like? He cannot tell us; and you and I cannot recall what it was like. The inmost psychic processes of infant and child are always veiled from view. Nevertheless, we can gain a just and useful picture of the "psychology" of a baby, even at the tender age of 4 weeks, if we examine the different kinds of behavior of which he is capable. His behavior patterns, his behavior traits, tell us what he really is.

In 4 weeks the baby has made considerable progress. He is not quite as limp and "molluscous" as he was at birth. His body muscles have more tone; they tighten in tension when he is picked up. Therefore he seems less fragile, more organized.

Indeed, he *is* more organized. Growth is a process of progressive organization. It is not simply a matter of getting bigger and stronger. The

4 week old baby is much more mature than a new born baby because his whole action-system is more elaborately built up, more closely knit together. Multimillions of nerve fibers from millions of nerve cells have made new connections with each other and have improved their old connections with his internal organs and with his muscular system.

His breathing is deeper and more regular; his swallowing is firmer, he does not choke or regurgitate as freely as he used to. He is less susceptible to startling, jaw trembling, and sneezing. His temperature regulation is steadier. All his vegetative functions are under better control, because the chemistry of his body fluids as well as the "vegetative" part of his nervous system has made adjustments to his postnatal environment.

But he is by no means a vegetable. He evidences an unmistakable psychological interest in his bodily functions and bodily experiences. He gives manifest attention to the well-being that suffuses him after a meal; he enjoys the massive warmth and tingle of the bath; he responds to the snugness of being wrapped up or of being securely held. He reacts positively to comforts and satisfactions; he reacts negatively to discomforts and denials. By crying and other sign language he expresses demands and desires. He is far from empty-minded. He is far from being a mere automaton. There may even be a trace of volition in some of his behavior. At any rate we cannot think of him as being a mere bundle of reflexes. From the standpoint of 4-week-oldness his behavior is patterned, meaningful, significant.

He still sleeps most of the day and night, as much as twenty hours out of the twenty-four; but his waking up is more decisive and more business-like than it was even a fortnight ago. His eyes roll less aimlessly; the twelve diminutive but all-important muscles that operate the movements of the eye balls are assuming directive control. He is now able to hold both eyes in a fixed position, staring vaguely at a window or wall. This does not mean that he actually perceives the outlines of the window; the nerve cells of the brain cortex are not sufficiently grown for that. Yet he is especially regardful of the human face when it comes noddingly

into his field of vision. His general body activity diminishes when this "interesting" optical and social stimulus meets the eye. In yet another month he will converge both eyes upon a near object. Then we may say he has truly begun to use his binoculars.

At 4 weeks his range of eye movements is limited by incomplete head control. He tends to keep his head to one side. You can entice him to look at a dangling toy held directly before his eyes, and he will follow it a short distance when it is moved toward the midline; but it will take another month or two before he will follow way across from one horizon to the opposite horizon.

At 16 weeks his head will prefer the midline, facing the zenith. If during the first few months the head prefers the horizon or side position, it is for good developmental reasons. This position enables the baby to catch glimpses of his hand, for he often holds his arm extended toward the same side to which his head is directed, the other arm being flexed at the shoulder.

This sideward attitude of head and arm (sometimes called the tonic-neck-reflex) is a normal stage of growth which should not be tampered with simply because it appears asymmetrical. It is a natural form of asymmetry which serves to bring eyes and hands into coordination, and such natural postures are entitled to respect. At 4 weeks the baby's hands are usually fisted. (Another natural posture,—how silly it would be to keep prying open the hands; they will remain open in due course when the baby is ready to reach.)

Just now, at the age of 4 weeks, the baby is beginning to reach, but he does so with his eyes rather than his hands. The eyes take the lead in the organization of his growing brain. He cannot hold a rattle prolongedly until about the age of 8 weeks; at first he merely holds without looking. In another month he both holds and looks,—still later he seizes on sight. The coordination of hands and eyes is a long and complicated process. It takes time. It needs understanding.

The 4 week old baby is not ready for social stimulation. His vegetative needs, his sensori-motor experiences are most important. He is often

busiest when he is apparently quiescent. His behavior patterns are undergoing organization and re-organization, through immobilization as well as through activity. He cannot tell us what is happening because his laryngeal vocabulary is limited to a few throaty sounds. But he makes his developmental needs articulate in many other ways. This will become clear when we describe the daily cycle of his home behavior.

§ 2. BEHAVIOR DAY

THE behavior profile which you have just read summarizes the behavior capacities and characteristics of the 4 week old baby. How will he display these characteristics; how will he use his capacities in the course of a day? He answers this question for us in the form of his behavior day. If he could keep a log book, he could record for us all of his activities and interests, and from such a record we could gain a picture of the manner in which he stores and distributes his energies.

On the basis of our own observations of the day-by-day living of the 4 week old infant, we can draw up a suggestive profile sketch of a more or less typical behavior day. We cannot set down any hard and fast hours because we must allow for many individual variations and because we shall assume for purposes of illustration a breast-fed baby on a self-demand schedule. The Egyptians reckoned their day from midnight, the Babylonians from sunrise, the Athenians from sunset; we shall reckon the baby's day from midnight and shall consider the full series of twenty-four hours which span the interval between two successive midnights.

Assume that the baby is sound asleep, at least on the first midnight. He may awake at almost any hour between 2 A.M. and 6 A.M. He awakes with a decisive, piercing crying. He awakes because his economy requires that once again he should have a ration of food. He wakes to eat. His cry is a more or less articulate statement of this extremely fundamental fact. Incidentally, it serves to announce his presence. Vaguely it may even express a sense of isolation, for he quiets momentarily when he is taken

up, whether by his father or his mother. But crying renews if he is not soon put to the breast. He needs a little help to secure the nipple. Crying ceases when he establishes contact.

He nurses for a period of from twenty to forty minutes. He may be seemingly satisfied with one breast but often when offered the second breast he takes it with revived vigor. His eyes are closed during the nursing. As he approaches satiety the sucking becomes more intermittent and he gradually tapers off into sleep.

A similar satiety response occurs if his tiny stomach is distended by air. The wise mother, therefore, "bubbles" the infant when shifting him from one breast to the other and at the termination of the meal. The baby is now under the benevolent anesthesia of natural sleep. The mother exploits this opportunity to change the wet diapers. By postponing the change in this way, the baby's impatience is circumvented. If, however, the diapers were soiled before the feeding, the change is made earlier.

The baby is put back into the bassinet. He sleeps for a period of from two to five hours and wakes up as before for the prime purpose of feeding again. We call this a sleep period rather than a nap. A nap is a restricted and well-demarcated interval of sleep immediately preceded or followed by an equally well-defined period of wakefulness. But at 4 weeks the feeding-sleeping-waking-feeding sequence is so closely merged that the baby's day resolves itself into five or six zones of sleep; each terminating typically with a hunger cry. The baby has not yet learned to wake up for more advanced reasons. He does not nap. His capacity for wakefulness is very immature.

In the late afternoon (typically between four and six o'clock), however, he has a wider margin for perceptual and pre-social behavior. This, therefore, is an optimal time, although not the conventional one, for his daily bath. Where he might show resistance in the morning, he now enjoys the experience of immersion in the tepid water. His eyes open wider; his general body activity may abate. He often gives tokens of pleasurable response to the sound of the voice and to the handling which gives him

a feeling of tactility, and to being tucked in when he is dressed and restored to the bassinet for another sleep period.

Whether the infant cries because he is awake, or whether he is awake because he cries poses a philosophical problem. The 4 week old infant is maturing his capacity to wake up and to extend his areas of sense perception. Hunger is the chief cause of his crying but his cries are beginning to differentiate and there are distinctive features in the cries associated with various kinds of discomfort.

He frets or cries when his alimentary tract and his eliminative organs are not functioning smoothly. He basks with contentment when his physiological wellbeing is at least temporarily achieved. In these brief periods he has a margin for more advanced perceptual adjustments. He may give absorbed attention to his sense of wellbeing. He likes to gaze in the direction of his accustomed tonic-neck-reflex attitude and sometimes his fretfulness subsides if he is given an opportunity to fixate his restless eyes on some large and not too bright pattern.

Needless to say, these evidences of perceptual and pre-social interest are slight and fugitive. Some children do not show them at all until the age of 6 or 8 weeks. At times this early crying seems to be quite without reason; almost as though it were crying for its own sake. But the very fact that the baby quiets recurrently to slight environmental changes suggests that he is entitled to some of these changes. The handling should be restricted to his actual needs. He is not ready for social stimulation. At this age no two behavior days are likely to be identical. Some are stormier than others. Excess storminess may mean that the appropriate adjustments between the organism and the environment have not been attained. All of which suggests that it is well to be alert to such signals as the baby is able to give during the course of his behavior day.

The foregoing behavior day is not set up as a model, but as a suggestive example. This also holds true for the behavior days at later age levels

FOUR WEEKS OLD

presented in Chapters 10-19. They are merely illustrative behavior days. Individual differences are to be expected.

Further child care details for each age are given in the double column text. [*Specific guidance suggestions are enclosed in brackets.*]

SLEEP

Onset—The baby gradually drops off to sleep toward the end of the nursing process when sucking becomes intermittent. He will not accept the nipple when sleep is associated with satiety. If wakefulness follows one of the feedings, he may cry prior to the next sleep period.

Waking—The baby cries as he awakens. He may stop momentarily as his diaper is changed, especially when it is only wet. Crying usually continues until he is fed.

Periods—Four to five periods in twenty-four hours. The reduction from seven to eight at birth is accomplished by the merging of two sleep periods. Further reduction may be accomplished by the dropping-out of a sleep period between two successive feedings.

[The infant should be cared for as soon as he awakens crying. If crying precedes going to sleep, release from crying into sleep may be assisted by mild and brief rocking of bassinet or carriage, perhaps accompanied by singing.]

FEEDING

Number—The infant spontaneously cuts down his feedings from seven to eight at birth to five or six at 4 weeks. This is accomplished by merging two adjacent feedings. This reduction may not hold for long but returns later.

Amount—The total amount may fluctuate between 18 ounces and 25 ounces from 2 to

4 weeks of age, after which there is a more rapid rise to 32 or 36 ounces by 6 to 8 weeks of age. There may be no more than a one ounce fluctuation in the amount of each feeding at 4 weeks of age, but this rapidly increases to a three to four ounce fluctuation by 6 to 8 weeks.

Duration—Sucking time varies greatly from child to child but is usually 30 to 40 minutes and may even be longer during the evening feedings.

Breast and Bottle Feeding—Crying demands may be quieted by placing the baby on the mother's lap, but more frequently they are quieted after he secures the breast. He needs help to secure the nipple. The tongue has become more efficient in grasping the nipple and in exerting back-and-forth suction. With satiety the infant falls asleep, will not accept the re-introduction of the nipple, and may show transient facial brightening.

[The majority of infants know when they are hungry and are able to express their hunger by crying. They become more proficient in this innate ability if they are allowed to exercise it. Their proficiency is also promoted if their demands are answered with promptness and if satiety both for food and sucking is insured. This is most easily accomplished with breast feeding. Both breasts should be presented at each feeding. The first breast is alternated from feeding to feeding even though the child may refuse the second breast at times. The amount taken should be recorded. This can most easily be accomplished by

weighing the breast-fed baby before and after each feeding with the same clothes on, the difference being the intake of milk.]

ELIMINATION

Bowel—One to three or even four movements, on awakening from sleep.

Bladder—The baby may cry when his diaper is wet and quiets when changed. This pattern is only occasional and does not last beyond 6 weeks of age.

[If crying is associated with wet or soiled diapers, changing will quiet the infant. This cause of crying is to be differentiated from hunger crying.]

BATH AND DRESSING

The baby now enjoys the bath. He does not like to be dressed and undressed.

[Clothing should be as simple as possible. Preferably it should not be put on over the baby's head.]

SELF-ACTIVITY

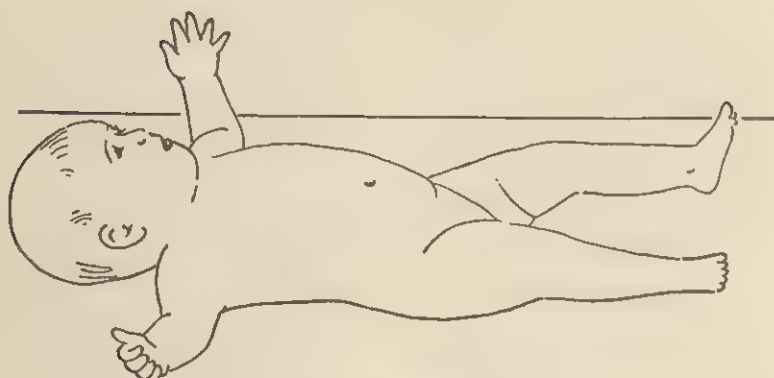
The infant stares at lights and windows. He favors turning his head to one side or the other, according to his tonic-neck-re-

flex. He may become angry if turned on the side away from the light. He quiets as he is shifted toward the light. This desire for light and brightness, apart from sunlight to which he makes a violent negative response, is later shown at 8 to 10 weeks in an interest in red and orange colors. Intense crying may be controlled by having a bright-colored cretonne pillow to gaze upon.

Visual experience with light and bright colors is important to the child as well as is the food in his stomach.

SOCIALITY

The baby stares at faces that are close by. If he cries in the evening—which is his way of asking for social stimulation—he quiets if he is picked up and held or if he is allowed to lie naked on a table where he can hear voices and look at lights for an hour or two. This demand is most frequent from 6 to 8 weeks, and its total duration is so related to a growth process that the end-results appear to be similar whether he is allowed to cry it out or his demands are satisfied. By 8 weeks he likes to follow movement and enjoys seeing people move about the room.

SIXTEEN WEEKS OLD

§ 1. BEHAVIOR PROFILE

THE FOUR WEEK OLD infant was quite content to lie on his back. He could not support his head on his own shoulders. But the 16 week old infant glories in the exercise of his growing capacity to hold his head upright. He likes to be translated from the supine to a propped sitting position. His eyes widen, his pulse strengthens, his breathing quickens as he is shifted from horizontal to perpendicular. He holds his head quite steady while bolstering pillows or his mother's hands supply the necessary support for his wobbly trunk. For some ten minutes at a time he relishes his new commanding outlook upon the surrounding world.

He no longer stares blankly. He rotates his head freely from side to side as he lies in his crib,—indeed so freely that the rubbing produces an erosive bald spot. (The spot is oblate and favors his preferred side.) He moves his eyes in active inspection. He fixes them on this and that. He

looks at his own hand; he looks at the kitchen sink; he looks at a toy which his mother dangles before him; he may even look from the toy to his mother's hand, and then back again at the toy, a sign of his increasing discrimination. He is becoming perceptive. He is also becoming more expressive. He smiles on the mere sight of a face. He coos, bubbles, chuckles, gurgles, and even laughs aloud.

The provocations for these vocalizations are both internal and external, but he is much less "subjective" than he was at the age of 4 weeks, much less wrapped up in himself. He is more bound up with his environment: he is sensitive to cultural cues, he "notices" sounds, especially those of the human voice; he "recognizes" his mother; he is so accustomed to certain routines that he expects certain things to happen at meal time and bath time. He betrays these expectancies in his countenance and in his postures. So the household is also becoming sensitive to his cues. The two-way reciprocity of cues is the basis of acculturation.

Having gained elementary management of the muscles which direct his eyes, and the muscles which erect and rotate his head, the next developmental task calls for a better management of his hands. (It is interesting to note that he can "pick up" a small object with his eyes long before he can pick it up with his fingers!)

At 16 weeks the hand is no longer predominantly fisted. It has loosened up. The fingers are more nimble, more busy. The baby still looks at his hands on occasion, but he has a new trick; he brings them together over his chest, and engages them in mutual fingering play. His fingers finger his fingers! Thus he himself touches and is touched simultaneously. This double touch is a lesson in self-discovery. He comes to appreciate what his fingers are; and that objects are something different. Putting fingers into the mouth and putting objects into the mouth also help to clear up these fundamental distinctions. The baby has to learn his physics and his anatomy as well as his sociology.

And so in the next three months he lays hold of the physical world with his hands as well as his eyes. As once he showed visual hunger, now he shows touch hunger. He is ravenous in his desire to approach, to contact,

to grasp, to feel, and to manipulate. Whether lying in a crib or seated in a lap, he shows a psycho-motor eagerness when an object comes within reach. At 16 weeks his shoulders strain, and his arms activate as a toy is brought near. In another month his hands close in on the object, corral it, grasp it on contact. In yet another month or two he makes direct one-handed approach on sight. These advancing coordinations are organized through the steady process of growth. At 16 weeks he clutches rather than prehends. He clasps his coverlet, pulling it over his face quite uncritically. This behavior pattern is immature but it foretokens more advanced forms of grasp and manipulation.

A baby is never complete. He is always in the making. But even his incomplete abilities are charged with potentialities. Accordingly there is much promise in the cooing, the expectant inspection, the excited breathing, the mutual fingering, and the coverlet clutching of the socially smiling, just sixteen baby.

§ 2. BEHAVIOR DAY

WHEN DOES THE SIXTEEN WEEK OLD baby awake? Anytime between 5 and 8 o'clock in the morning. One can scarcely list the clock hours of a typical behavior day at this age, because the organism is in a highly transitional stage of readjustment. Besides, the baby's waking hour may depend upon whether he was roused for a feeding at 10 o'clock of the previous night. If he wakes at 5 or 6 o'clock he is likely to show in the next few weeks a steady trend toward a later hour. This trend is rather consistent. He does not exhibit the wide fluctuations in waking time characteristic of 4 weeks of age.

He may wake with a prompt cry to announce that he is hungry. But to say that he wakes simply to eat would do him an injustice, for often instead of crying he "talks" to himself for fifteen minutes or more. All his behavior, including his self-waking, is more demarcated. His hunger cry is business-like. He quiets promptly when his mother comes; but he

also breaks into a renewed spell of crying if his patience span is imposed upon.

His morning appetite is acute. He approaches the breast with mouth open and lips poised. He no longer needs help in establishing contact, and sucks strenuously.

His mother "talks" to him a little after feeding because he has a surplus margin of interest in sights and sounds. He is not perturbed by wet or soiled diapers, which, however, are changed before the next sleep period. The length of this period varies. If he is on a five meal schedule he takes a short morning nap. After perhaps an hour he spontaneously wakes and once more begins to play. His wakefulness is more defined, more purposive in character than it was at 4 weeks. His sleep is less closely merged with feeding; it may be both preceded and followed by an active playful wakefulness. Such a sleep interlude is truly a nap, quite different from the vaguer vegetative somnolence of the newborn.

He awakes to play and he plays to be awake. In this play he exercises his growing sensori-motor powers: he deploys his eyes and rotates his head to inspect his surroundings, brings his fingerling hands together, clutches his dress, coos, laughs.

Another nap now follows. He likes to take this long morning nap in his carriage on an outdoor porch, or in an airy room, away from the din and activity of the household. He may resist briefly when a bonnet is placed around his actively shifting head, but if not further molested he falls into a deepened slumber, to wake again both for play and for food. Play has become an occupation as essential for his psychological growth as sleep. He is working toward a three phase cycle of Play activity—Feeding—Sleeping—Play activity—Feeding—Sleeping. But the phases do not always occur distinctly in this sequence. After the early afternoon sleep, he may wake up with a rather prompt hunger cry. Then he will be ready to play only after he has been fed.

The most elaborate and well-defined period of wakefulness is likely to occur in the late afternoon or evening. Having been replenished he plays by himself contentedly for perhaps a half hour. Then he may fuss,

not for food but for attention and judicious stimulation. His wakefulness is deeper and wider. He likes to be shifted from the confines of crib to the vaster expanse of couch or bed, perhaps with partial removal of constricting clothes. He enjoys the novelty of such change of scene; he may relish for a short period a well-propped partial sitting position, from which he sees and hears the world at new angles. Dangling toys intrigue him; he may hold a rattle for a few minutes. He is content with mild and brief variations of experience.

The curve of sociality mounts so high that late afternoon is a favorable time for the traditional "morning" bath. The bath has no greater sanitary importance at this transposed hour; but its behavior value may be enhanced thereby both for mother and child.

After his evening meal, which may include mashed banana, the baby "talks to himself." He may suck his fingers for several minutes, for the hand to mouth reaction is so strong at this age that it usually occurs after each feeding.

At night he is capable of a twelve-hour span of sleep. He is stretching the length of nocturnal sleep and the length of day-light wakefulness. In obedience to his private alarm clock he sleeps till the following day. He wakes partly from necessity (to eat); partly from predilection (to be up and doing).

SLEEP

Night

Onset—The baby falls asleep fairly soon after his 6 P.M. feeding.

Waking—Time of waking varies, with different infants, from 5 to 8 A.M. Those who wake early do not usually cry, but talk and play with their hands or with the bed-covers until they are hungry. Desire to be fed is indicated by fussing.

Nap

Onset and Waking—The infant does not usually fall asleep at the end of a feeding,

but talks to himself or plays with his hands for a while. Crying may precede sleep, though not at every nap period. If crying does occur, the child may need the quieting effect of back and forth movement of either carriage or crib, especially after the 10 A.M. and 2 P.M. feedings. He appears happy when waking from naps and does not cry.

Periods—Three naps in 24 hours are characteristic of this age, though there may be two or four instead of three.

Naps occur in the early morning, late morning, afternoon and evening. The early morning nap may merge with night sleep.

particularly if waking is late (around 8 A.M.) The late morning nap may alternate with the afternoon nap. An evening nap is unusual and comes in only with a recurrence of the evening wakefulness characteristic of a younger age.

Place—The napping place has shifted from bassinet to crib. The baby carriage is usually the best place for the morning out-of-door nap.

FEEDING

Self-Regulation—A clear-cut crying demand on waking becomes less frequent from 12 weeks on, usually being associated only with the first morning waking. At other feedings the infant is more able to wait and can to some extent adapt to the demands of his environment. He may indicate a desire to be fed by fussing. At this age there may be occasional refusals (even to the extent of screaming) of the noon or 6 P.M. feeding. The poorer feeder may have a tendency to split one of these feedings into two parts, taking the second part after a one hour interval.

[If pre- and post-feeding weighing causes crying, it may be discontinued since it is no longer necessary to keep a very strict check on intake.

There is often a decreased appetite for milk at this age and vomiting may occur with the poorer feeders.]

Number—There are from three to five feedings at this age, the two earliest morning feedings often merging. The infant no longer spontaneously wakens for a 10 to 11 P.M. feeding.

Amount—The total daily intake may vary between 25 and 32 ounces. The poorer feeders do not fluctuate as much as the good feeders and are apt to hold close to 25

ounces. Individual feedings for the good feeders may vary in amount by five or six ounces; for the poorer feeders there is little fluctuation. Both breasts are preferred, except at the 10 A.M. feeding when usually only one is taken. If the baby is still waked for a 10 P.M. feeding, then only one breast may be taken at the early morning feeding. *Duration*—Both breasts—fifteen to twenty minutes. One breast—ten to fifteen minutes. The 5 to 6 P.M. feeding may take as long as twenty-five to thirty minutes.

Breast and Bottle Feeding—The infant may fuss before feeding but often waits until approximately feeding time. Some cry vigorously on the scales or as the mother exposes her breast, in anticipation. When the nipple is presented, finger or tongue sucking gives way to poised lips and grasping with hands. Hands may come to the breast or may grasp at clothes as the infant secures the nipple with very little assistance from the adult. During nursing he may shift his regard from the breast, to his mother's face, to the surroundings,—and especially to other people who may be present. Lips are pursed at the corners and sucking is strong. It may be so much stronger than the swallowing ability that choking results. Also, in bottle feeding the infant is frequently called upon to adjust to the deflation of the rubber nipple. The harder he sucks the flatter the nipple becomes until finally he is able to release the nipple and wait until air distends it.

After initial satiety the infant may release and re-secure the breast repeatedly in a playful manner, with smiling. With final satiety he arches his back and may growl if forced back to the breast. He usually burps spontaneously after finishing the first breast. Though he may seem satiated as he is shifted to the second breast, his impatient

SIXTEEN WEEKS OLD

eagerness usually leads him to make a good response to it. With final satiety he is apt to suck his tongue or thumb, and is often very talkative.

[Sucking demand is so strong at this age that it is best to satisfy it before solid foods are given.]

Spoon Feeding—Tongue projection is still so marked that little food is swallowed unless it is placed on the back of the tongue. Though the patterns for handling solid foods are very inadequate, mashed banana is a uniformly preferred food at this age. *Cup Feeding*—Approximation of the lips to the rim of the cup is still very inadequate and much spilling results. In spite of this, the infant often enjoys the process of drinking water or fruit juices.

ELIMINATION

Bowel—There are one or two movements a day though a day is frequently skipped. The time of occurrence varies from child to child though it is usually consistent for any one child. The most common time is after a feeding, and it may be delayed long enough for a response to a pot to be obtained, though if such a response is secured it does not usually continue for longer than seven to ten days. If the movement does not follow a feeding it is apt to occur during the wakeful period from 6 to 10 A.M. If it occurs during a feeding, the baby may regurgitate.

BATH AND DRESSING

At this age the baby expresses his love of his bath by kicking and laughing. He does not like to have the bath too deep and may like to lie on his stomach as he is bathed. Around 20 weeks he may hold onto the side

of the tub, and may express disappointment when taken out.

SELF-ACTIVITY

Waking periods are now longer and are often spent in physical activity, such as kicking, rotating head from side to side, or rolling to one side. The infant is now able to grasp objects, and particularly enjoys a dangling toy. He also likes to clasp his hands together, and may suck his thumb or fingers before and after feedings. He is now very talkative, often vocalizing with delight, especially in the early morning and afternoon. Talking and crying may follow each other closely. He blows bubbles less than formerly. He enjoys a shift to a couch or large bed in the afternoon and may be good alone for as much as an hour, from 3 to 4 P.M., though he is also interested in people. He likes to have a light after 6 P.M. but no longer demands it. If it is left on it may keep him awake.

SOCIALITY

There is at this age an increased demand for sociality. This may come in relation to feedings, often before each feeding, though with some infants it occurs during or after the feeding. Demand for social attention is especially strong toward the end of the day, around 5 P.M. The infant likes to be shifted from his bed for this social period. He particularly likes to be in his carriage. There is, at 12 to 16 weeks, a marked interest in the father and also in young children. Social play with the father may go more smoothly than with the mother since the baby does not associate food with the father. He likes to have people pay attention to him, talk to him, sing to him. He

BEHAVIOR DAY

is apt to cry in supine and seems to prefer sitting. By 20 weeks he so much enjoys being talked to that he may cry when people leave.

[He is apt to be more demanding of social attention if he sleeps in the same room with his mother, especially if she stirs in the early morning.]

TWENTY-EIGHT WEEKS OLD

§ 1. BEHAVIOR PROFILE

THE TWENTY-EIGHT WEEK OLD infant likes to sit in a high chair (or it may be for safety reasons a lower chair). When he wakes from a nap he is quite likely to lift his head, as though straining to reach a perpendicular position. He wishes to sit up and take notice; and above all he wishes to get hold of some object (a clothespin will do), which he can handle, mouth, and bang.

This is a heyday for manipulation. The baby has "learned" to balance his head; he can almost balance his trunk; he knows how to grasp on sight; he is eager to try out his rapidly growing abilities.

His eagerness and intentness show that his play is serious business. He is discovering the size, shape, weight, and texture of things. He is no longer content merely to finger his hands, as he did at 16 weeks. He wants to finger the clothespin, to get the feel of it. He puts it to his mouth, pulls

it out, looks at it, rotates it with a twist of the wrist, puts it back into his mouth, pulls it out, gives it another twist, brings up his free hand, transfers the clothespin from hand to hand, bangs it on the high chair tray, drops it, recovers it, retransfers it from hand to hand, drops it out of reach, leans over to retrieve it, fails, fusses a moment, and then bangs the tray with his empty hand, etc., etc., throughout his busy day. He is never idle because he is under such a compelling urge to use his hands for manipulation and exploitation.

His hands are not quite as paw-like as they were. He is beginning to use his thumb more adeptly, and to tilt his hand just prior to grasp. But his fine finger coordination is crude compared with what it will be at 40 weeks. He still is more expert with his eyes than with his hands, he keenly looks at a small object which he cannot yet pick up deftly.

His urge to manipulate is so strong that he can play by himself happily for short periods. At these times he should be left to his own devices. It is characteristic of him to be self-contained as well as sociable. He will show a similar self-containedness at a higher level when he is in the 18-months-old run-about stage.

Now he is sedentary. So he sits in his chair; he watches with interest the activities of the household. He vocalizes his eagerness not to say impatience when he spies a bottle or a dish and sees his mother preparing a meal for him. He may reach for a dish quite out of reach, because he still has something to learn about distance—and time too. But his mouth and throat muscles are much more highly organized than they were at 16 weeks. He can now “handle” solids, which before tended to make him cough or choke. Nor does he extrude his tongue with the infantile ineptitude of earlier days. His lips sweep competently over the spoon in his mouth; his tongue smacks and on satiety he keeps his mouth tightly closed. All this denotes a great advance in his neuro-muscular organization.

But, of course, he cannot grasp a spoon adaptively by the handle nor use it as a utensil. At one year he will be able to insert a spoon into a cup. Not until about 2 years can he put the burden of a laden spoon into his

mouth, unaided, without excessive spilling. The spoon is a complicated cultural tool. The 28 week old infant in his manipulation is laying the foundations for the motor mastery of this tool.

All told the 28 week old baby presents a mixture of versatility and of transitional incompleteness. He is vastly superior to the 16 week old baby in the combined command of eyes and hands; but he is only at the brink of abilities which will come to maturity during the rest of the first year. He is at the brink of sitting alone; at the close of the year he will stand alone. He can hold two objects, one in each hand; in time he will combine them. He is vocalizing vowels and consonants in great variety. Soon they will take on the status of words. Through his ceaseless manipulations, transfers and mouthings he is building up a wealth of perceptions which will make him feel more at home in his physical surroundings. Similarly he is amassing a wealth of social perceptions; he is reading the facial expressions, the gestures, the postural attitudes and the goings and comings of the domestic routine. These social perceptions are not yet very sophisticated, but they are sensitive; they are patterned; and they are essential to the continuing growth of his personality.

At this age the child's abilities are in relative balance. The behavior patterns of the 28 week old baby are in good focus. His interests are balanced; he is both self-contained and sociable; he alternates with ease from spontaneous self activity to social reference activity. He likes to sit up (with support) but he is also quite content to lie supine. He likes to manipulate toys, but almost any object will do; or no object at all will do, for then he moves his hand across the field of vision for the pleasure (and educational value) of seeing it move. All in all his behavior traits are well counterpoised. But the tensions of growth will soon again throw them out of their comparative equilibrium as he forges ahead to a still higher level of maturity.

§2. BEHAVIOR DAY

OUR TWENTY-EIGHT WEEK OLD baby wakes up at almost any time between 6 and 8 A.M. He is reputed to wake up "soaking wet." His urinary output apparently has increased since the age of 16 weeks. But he is quite indifferent and typically amuses himself with play of his own devices. Now and then an infant of lusty appetite may demand a prompt feeding on waking, but 28 weeks is a relatively amiable and equable age, and mothers report that children of this age usually wake up "good," playing contentedly for twenty to thirty minutes. A corner of the blanket, a loose end of tape, or even his own free moving hand will serve his playful purposes. He may vocalize but not as much as at 16 weeks, for 28 weeks is the heyday of manipulation and visual-manual play.

Breast feeding may still be in his regime. If so, he takes the breast most satisfactorily for the morning feeding, but he is beginning to show a preference for bottle and solids at later feedings. Incidentally, the mother has found this early breast feeding very convenient because there is considerable variation in the morning waking hour during the interval between 16 and 28 weeks, and often an immediate demand for food. Whether at breast or bottle he displays increased efficiency in sucking.

Typically the period from 6 to 8 A.M. is one of pleasant wakefulness. During this period the baby is most comfortable in a room by himself. He will play by himself contentedly for twenty minutes, then likes to be given a toy, and at the end of another twenty minutes or so is propped up in his crib to survey his surroundings.

At 9 o'clock he is ready for a trip to the kitchen where he is placed in a safe chair, which gives him a commanding view of the preliminaries of his next meal. He is not without anticipation and he becomes excited when the food approaches. He is fed in his chair, or if his postural and temperamental characteristics so require, he is fed on a lap. He poises his lips cooperatively for the spoon and a smile of satisfaction and satiation terminates the meal.

His daily bowel movement may occur at this time or before the morning feeding. In the period from 16 to 20 weeks he displayed some adaptive response to placement on the toilet, but thereafter he began to show a strenuous refusal. The mother has by this time accepted his refusal and is delaying systematic "training." He gives no evidence of being perturbed by soiled diapers.

At 10 o'clock he is put into his carriage which is wheeled out of doors or onto a porch, and after a draught at the bottle he goes to sleep with relative promptness. He wakes at about noon or 1 o'clock. He wakes happily and again plays contentedly by himself in the carriage. If he fusses slightly he is readily appeased by a toy and later by being propped up in a supported sitting position.

By 2 o'clock he is ready for his vegetable meal followed by a bottle which he takes in his chair or crib. Weather permitting, it is time for a trip in his carriage. He does not altogether acquiesce in the application of a bonnet but he definitely enjoys the sight-seeing opportunities offered by the perambulator. This is the first age when the baby is very "good" on these trips.

The afternoon nap comes at about 3:30 and lasts about an hour. He wakes somewhat more slowly from this nap and shows somewhat less self-dependence. As at earlier ages, he likes a little afternoon sociability as well as orange juice. Five o'clock, therefore, proves to be a favorable hour for the bath, unless an early waking from the morning nap made a noon bath more acceptable for the household. In any event he enjoys the bath hugely. Divestment of clothes is both a pleasure in itself and an anticipation of things to come.

The last feeding comes at about 5:30. It may be at breast but more usually at bottle. And so to bed at 6 o'clock when he falls promptly to sleep for a twelve hour stretch.

SLEEP

Night

Onset—The baby tends to fall asleep directly after his 6 P.M.* feeding.

Waking—Very few babies of this age are awakened for a 10 P.M. feeding, and even fewer wake themselves at this hour. If they are awakened, they take very little milk or refuse the feeding entirely; but if they wake voluntarily they can be quieted only by a feeding. The majority sleep right through the night, for eleven to thirteen hours, waking around 6 A.M. or later. Babies of this age are usually "good" for half an hour or longer after waking before they demand a feeding.

Nap

Onset and Waking—There is now no difficulty in going to sleep or in waking. Sleep is usually closely associated with the 10 A.M. and the 6 P.M. feedings.

Periods—There is at this age a fairly wide variety of nap patterns. There are usually two to three naps a day. The mid-morning and afternoon naps are the most stable. Some children have a consistent pattern of a long morning and a short afternoon nap (or vice versa) whereas others alternate the length, depending on the length of the morning nap. An evening nap does not usually occur unless it is defined by a 10 P.M. waking.

Place—Babies nap best in their carriages out of doors, for the morning nap. Some have their afternoon nap while being wheeled in their carriages. If not, they usually have this nap in their cribs in the house, during the latter part of the afternoon.

FEEDING

Self-Regulation—Self-demand occurs mainly for the first morning feeding. The time of this demand fluctuates according to the hour of waking. Some infants demand this feeding immediately on waking, but most will wait for half an hour or so. Other feedings are accepted at the times determined by the mother in accordance with the baby's growing needs and the ease or difficulty of his adjustment to the demands of the household schedule.

The baby is beginning to show a preference for the bottle and for solid foods rather than the breast, and takes the breast best at the first morning feeding. Solids are taken best at 8 to 10 A.M. and at 2 P.M.

[With the decrease in sucking demands, solid foods may now be given at the beginning of each meal.

From 32 to 36 weeks the infant is very impatient as he watches his meal being prepared. This can be remedied by having the meal ready before he sees it.]

Number—Three to four a day. Four persists if the child demands a 6 A.M. feeding or if the 10 P.M. feeding is continued.

Amount—The total amount is now difficult to judge because of the addition of solid foods. However, the poor feeders still keep to a consistent level of intake without fluctuating more than an ounce or two at a feeding, whereas the good feeders may show as much as a ten ounce fluctuation at a feeding. The early morning and the 6 P.M. are the best meals (ten to eleven ounces), and the 2 P.M. is the poorest (four to five ounces). If the breast is given at the 2 P.M. feeding it is usually taken poorly or refused.

Duration—Eight to ten minutes for breast or bottle feeding.

* We refer to a 10 A.M., 2 P.M., 6 P.M. feeding simply for convenience.

Breast and Bottle Feeding—The infant vocalizes his eagerness when he sees the breast or bottle. He places his hands on breast or bottle, securing the nipple with ease. He exerts good continuous sucking, with the lower lip rolled out and forward and with good pursing at the corners. During the feeding, hands repeatedly grasp and release the breast or bottle. This grasp and release is similar to the 16 week old tongue pattern of grasp and release. The infant regards the nipple as he withdraws from the breast or pulls the bottle away from his mouth.

With satiety he tries to sit up, and when helped to sit smiles at his mother or at others present, and may shake his head from side to side as though saying, "No, no."

[Since the infant is apt to bite the nipple, especially after the 2 P.M. feeding, after taking only a few ounces, it may be best to omit this bottle and to give whatever milk the infant will take from a cup.]

Spoon Feeding—The baby at this age anticipates spoon feeding with eagerness, poising his mouth as he reaches toward the spoon with his head. Hands may be fisted at shoulder level or may rest on the tray of the high chair—if he is capable of being fed in a high chair. He sucks the food from the spoon. With succeeding spoonful he shows increasing eagerness and may grasp the spoon or the adult's finger. With satiety he bites on the spoon, and smiles after the feeding.

Cup Feeding—The infant shows a new awareness of the cup and spontaneously makes demands to be cup fed. He apparently associates the running of water with the filling of the cup, and on sight of the cup he reaches forward with head rather than with hands, and with poised mouth. There is better approximation of his lips

to the rim of the cup, but he has difficulty when the cup is removed in retaining the fluid in his mouth. He is incapable of taking more than one or two swallows at a time. He definitely prefers water or juices to milk, and may refuse milk from a cup.

ELIMINATION

Bowel—One movement a day (in the diaper) usually from 9 to 10 A.M., though it may occasionally occur in the late afternoon. The earlier response to the pot is no longer present. In fact strong resistance to the pot may be shown. There is no demand to be changed except on the part of a few fastidious girls who cry vigorously until they are changed. Babies of this type are more apt to be trained easily and early to the pot, and this behavior, once established, is usually sustained.

Bladder—Urination is still frequent and so excessive in amount that the child is often very wet when changed. Sex differences are noted at this age in that some girls are establishing a longer interval—as long as one to two hours—after which they may respond to the pot.

BATH AND DRESSING

Bath—The baby enjoys being undressed for his bath at this age, and he also enjoys his bath. His hands are so active that objects are no longer safe on the bath table. In the tub, the baby splashes vigorously, usually with his hands though sometimes with his feet. He may close his eyes at the sight of the washcloth. It may suit the demands of both child and household to shift the bath hour ahead to the noon hour.

[When the infant is unhappily conscious of the approach of the washcloth, it is wise to approach him from the rear, washing his

ears and cheeks from the back toward the front.]

Dressing—The baby likes to remove his bootees and also likes to play with the strings of his bootees or of his sweater.

SELF-ACTIVITY

The infant again enjoys supine. He hummocks, kicks, extends his legs upward, grasps his feet, brings them to his mouth, pulls off his bootees and stockings. He likes to watch his moving hand. He brings his hands less often to his mouth, and this occurs mostly after feeding or before sleep. He enjoys play with string, paper, soft rubber squeaky toys, and rattles. These he brings to his mouth and bites on. He vocalizes happily to himself, gurgling, growling, and making high squealing sounds. He is happier alone in both morning and late afternoon during his wakeful periods, until he indicates, by fussing, a desire for companionship.

[Around 32 weeks, the infant may frequently cry and need help in getting out of some awkward position.]

SOCIALITY

Babies of this age enjoy people not only for themselves but for what the people can do for them. Once the adult has given a toy or propped the baby sitting, the baby can let the adult go and can enjoy himself alone until he makes his next demand. He enjoys being wheeled along the street in his carriage, and although he enjoys sitting up for short periods, he is also content to lie down. He is beginning to respond to more than one person at a time, and likes to be handed back and forth from one person to another. He also likes rhythm, and enjoys being bounced on someone's knee. He differentiates between people, and demands more of the one who feeds him. He is lively with those whom he knows and is beginning to be shy with strangers, especially in new places.

[Around 32 weeks, though the baby enjoys the company of others, he may easily become over-excited. Instability of emotional make-up at this time is expressed in the close interplay of crying and laughter.]

FORTY WEEKS OLD

§1. BEHAVIOR PROFILE

THE FORTY WEEK OLD infant no longer takes kindly to the supine position. For the sleeping infant it may do; but when FORTY WEEKS awakes, he rolls over and sits up. He may even rear himself to a standing position, pulling himself by the palings of his crib. Man was meant to be a biped. There is an unmistakable hind-legs urge toward the perpendicular, which puts the baby on his feet. But the horizontal alignment is still under better control. For a few months the baby remains a quadruped, using his hands for locomotion as well as for manipulation.

In the evolution of the race, the upright posture was assumed for the purpose of emancipating the hands, freeing them for nobler and more refined uses. The 40 week old baby is developmentally in this transition phase of emancipation, and the higher uses of the hand are already well in evidence. He brings index finger and thumb into delicate pincer-like

opposition; he extends the index finger to poke and probe, to palpate and pluck. He can pluck a string and give it a tug. He is beginning to grasp things more adaptively by their handle. His inquisitive index finger will take him further and further into the third dimension. He will probe into holes and grooves and into the depths of a cup. Through these more refined manipulations he acquires a sense of hollow and solid; container and contained; up and down; side by side; in and out; apart and united.

The 40 week baby, therefore, is not nearly as naively single-minded as he was at twenty-eight weeks. He is beginning to see and to handle things in the depth of perspective. The universe is less flat, less simplex. He is conscious of *two* as well as *one*. Indeed, he puts two things together. He needs two clothespins instead of one to satisfy his impulse to combine and to bring together what is apart. This dim awareness of twoness is reflected in his experimental exploitation of play objects. He is more discriminating and sometimes actually dainty in his manipulations.

Socially, likewise, he is more discriminating, more perceptive of small variations in sight and sound. This greater perceptiveness makes him seem more sensitive, as indeed he is. He is sensitive to more events in his social environment; he is becoming responsive to demonstrations and to teaching. He has a new capacity for imitation. Accordingly he "learns" new nursery tricks like pat-a-cake and bye-bye. He could not "learn" them when he was twenty-eight weeks old, because he did not have the same perceptiveness for the actions of others, nor was the appropriate movement pattern as yet in his repertoire. His repertoire of movements depends upon the maturity of his nervous system. He cannot imitate any action until he is already capable of that action as the result of natural growth. If at the age of forty weeks you try to engage him in a game of back and forth ball play, he may disappoint you by holding onto the ball and merely waving it. But, of course, one *should* not be disappointed. In due time he will mature the motor capacity of release, and then he will roll the ball to you. Everything in season.

§2. BEHAVIOR DAY

THE FORTY WEEK OLD baby wakes anytime between 5 and 7 o'clock. He is likely to be wet but his fussing is often primarily for social attention. He is also likely to be keenly hungry and he imbibes his bottle with dispatch. He holds and pats his partially propped bottle. Should the nipple become deflated during the sucking, he is now an expert in waiting until it reinflates. After his bottle, he is wheeled into another room for partial isolation, unless he is already in a room of his own. If he does not have this isolation he is likely to be too demanding. He plays contentedly for an hour or more, if he has two or three shifts of toys.

At 8 o'clock he is ready for breakfast. He may take this in his high chair. He vocalizes "ma-ma" and "nam-nam" in his eager anticipation; but he has learned to inhibit some of his excitement and waits for the presentation of the dish of cereal. The demanding eagerness, however, returns if the mother is too slow in following one spoonful with the next. He associates an empty dish with the termination of the meal and he makes a ready transition to a period of play.

Between 8 and 10 o'clock he likes to be part of the household group. He is content to play in his high chair, pen or crib and may enjoy a shift from one station to another by way of variety.

He may have a bowel movement during this morning play period, or in some instances there is a toilet placement immediately following breakfast.

Ten o'clock often proves to be a convenient time for the bath. He greatly enjoys a bath and expresses eager anticipation when he hears the water running and sees the preparation. The bath is completed almost too soon for his preferences. He is likely to enjoy by way of playful contest the washing of his face with the washcloth. He plays with a water toy during the sanitary ministrations.

By about a quarter past ten he is ready for sleep. He sleeps well indoors.

This is his long nap. He wakes at about 1 o'clock and again usually wet. (Girls are more apt to be dry.) He may play contentedly for a brief period and then fusses for social attention.

He lunches at about 1:30 on spoon-fed vegetables. He opens his mouth decisively as the spoon is presented and swallows rapidly. He eats with new efficiency, moving steadily toward the completion of the meal. He becomes playful toward the end of the meal, manipulating empty dish or spoon. He finger feeds on spilled particles, thus exercising his new powers of precise pincer prehension.

At 2 o'clock, weather permitting, comes a carriage ride. He does not even yet accept his bonnet with full grace, but he enjoys sight-seeing. Nevertheless, he is not totally preoccupied with the scenery. He is in the early stages of independent sitting and of digital manipulation. He therefore likes to occupy himself with a toy even on his outdoor trips. His propensity to stand may be so strong that he needs a safety strap.

If he returns home dry at about 3 o'clock, he may respond to placement on the toilet. By this time he may be showing signs of sleepiness. He falls asleep promptly and naps from half an hour to an hour. He may wake up dry at about 4 o'clock. His nap is usually followed by orange juice which he relishes. This is typically the most social period of the day. He enjoys being a member of the household group. He enjoys social types of play including the usual nursery games. His sociality may lead to over-stimulation. He is beginning to show a temper by way of resistance or as a mode of communication, not to say environmental utilization. He is not yet using words but his vocalizations are more articulate, more insistent.

A supper of cereal and fruit follows at about 6 o'clock. He is usually ready for the night's sleep in a quarter of an hour. He may "talk" to himself for from fifteen minutes to an hour, or he may promptly fall asleep. He may cry out momentarily during the course of the night, without waking and without requiring attention.

SLEEP

Night

Onset—The baby still tends to fall asleep directly after his 6 P.M. feeding. A few infants who have had more difficulty in going to sleep and who have previously cried before some sleep periods may now talk for fifteen minutes to one hour before falling asleep.

[If there is resistance to being put to bed at the usual 6 P.M. hour, delay bedtime a half hour or more.]

Waking—Most infants sleep right through till 5 to 7 A.M., the trend being toward the later hour. Night waking seems to depend both on household conditions and on the child himself. The infant who sleeps in the same room with his parents may awaken when his parents go to bed, but usually falls right back to sleep after his diaper is changed. Some cry out in their sleep momentarily without waking, and require no attention. A few are beginning to have occasional wakeful periods of an hour or more between 2 and 4 A.M. During this period the baby may talk happily to himself or may crawl out from under the covers and play. Toward the end of this period he may fuss and may be unable to go back to sleep unless his diaper is changed or he is given a bottle.

Early wakers (5 to 6 A.M.) may want to be "changed" at once and then enjoy either vocal play lying down, or play with a toy sitting up. They are most contented in a room by themselves at this time and will remain so for 1 to 1½ hours provided they have two or three shifts of toys, before they fuss for their food. Late wakers (7 A.M. or later) tend to demand food shortly after waking.

Nap

Onset and Waking—The baby indicates his need for sleep by fussing, turning his head to one side, sucking his thumb or a piece of material, wriggling his pelvis, or pushing with his feet, and if he is put into his crib at such times he falls asleep fairly quickly. If no such need has been indicated he may accept being put down at the usual time but may remain awake.

The morning nap most often follows the 10 A.M. bath period (if the bath is given then) and the afternoon nap may follow a ride in the carriage—around 3 P.M.

Periods—There is not quite such a wide variety of nap patterns as at 28 weeks. There may be four short nap periods—one at each of the four periods of the day—or there may be only one long mid-morning nap. The most usual pattern is a long mid-morning and an unstable afternoon nap which comes and goes.

Place—This is a transitional period of sleeping indoors in preference to out of doors. Some infants give a clue to their demand for less light by placing their hands over their eyes, and usually sleep better indoors with the shades pulled.

FEEDING

Self-Regulation—The baby may indicate an early morning demand, but this demand is as much for company as for food. Breakfast is not usually served before 7 or 8 A.M. This meal is often preceded by a solitary play period of 1 to 1½ hours.

The infant takes his bottle alone for the first morning feeding if it is given then. It usually needs to be propped, though the baby will hold it alone toward the end of the feeding. At other feedings he demands that his bottle be held, and often enjoys

the bottle after he has had his solid food, sitting in his high chair. Most solid foods are taken well, and some preference is indicated by a razzing refusal of disliked foods. One ounce of milk may be accepted in a cup, but the tendency is to blow bubbles in the cup with a very rapid satiety of drinking. Orange juice and water are, however, taken well from a cup.

Although he is still eager for his feedings, he is not usually as impatient when he sees his meal being prepared as he was from 32 to 36 weeks. He tends to vocalize in anticipation rather than fussing and crying.

[The infant still needs to have some sucking at the bottle. If he does not, feedings are more difficult and prolonged because he will suck his fingers between spoonfuls.]

Number—Three meals a day, with fruit juice in the mid-afternoon. A bottle may be given as an extra first morning feeding as soon as he awakes. Night bottles are very rare. Some infants receive only two bottles, at 7 A.M. and 6 P.M., and others still continue on three bottles a day.

Amount—The total intake depends to a certain extent upon how much is offered. The infant now has a sense of finishing his bottle and therefore asks for no more than his bottle of eight ounces. He also "cleans up" his dish and takes it for granted that that is the end. Some infants have eaten a larger quantity before this age, others are just increasing their quantity at this time. The point of satiety indicates whether too much is being given, and the absence of any satiety patterns may indicate that more could be given.

Duration—Three to four minutes for a bottle. Five to ten minutes for solid food.

Bottle Feeding—Bottle feeding patterns are similar to 28 weeks patterns except that sucking is now more forceful and more rapid and the hands are taking more part

in holding the bottle. For the first morning feeding, which the baby usually takes alone, the bottle may be propped to one side or on his chest. This is necessary because the full bottle is too heavy for him to hold, though he manages it well, tilting it easily, as it empties. He may be able to resecure it if he loses it. Otherwise he fusses for assistance. At other feedings he likes to have someone hold his bottle for him.

Spoon Feeding—Most infants are fed in a high chair at this age. They express their eager anticipation with such vocalizing as "dada" or "nam-nam." They open their mouths as the spoon is presented, swallow rapidly as they draw in their lower lips. Lateral movements of chewing are just beginning. The infant may reach toward the dish or show eagerness if the mother is slow in presenting the food. Satiety is clearly expressed coincidentally with the emptying of the dish. If satiety precedes this, it is indicated by biting of the spoon or the infant's own tongue, by shaking the head "No," and by razzing good-naturedly but determinedly. The baby enjoys a short period of play with the empty dish and spoon.

[A few infants may still need to be fed on the mother's lap or half-propped in their cribs.

It is best to provide an unbreakable dish that can be used for play at the end of the meal.]

Cup Feeding—The baby drinks one ounce, one to two swallows at a time, with good lip approximation. There is still a tendency to spill out of the mouth as the cup is removed. The baby enjoys blowing bubbles and also enjoys playing at drinking from an empty cup.

Self Help—The baby finger feeds with spilled bits from his tray.

FORTY WEEKS OLD

ELIMINATION

Bowel—One to two movements a day, at 8 to 10 A.M. and/or 6 to 7 P.M. The baby may respond to the pot, especially if the bowel movement occurs after a meal. Some, especially girls, fuss to be changed.

Bladder—The baby may be dry after an hour's nap or a carriage ride and may respond to the pot if put on at once. However he may not urinate till just after he is taken off the pot. He may fuss to be changed in the middle of the night.

BATH AND DRESSING

The bath hour may continue to be at noon or in the late afternoon, but a morning bath is often most convenient for the household. The baby vigorously expresses anticipation when he hears the bath water running. He often prefers to lie prone in the bath tub, creeps better in water than on the floor, or rocks back and forth. He may cry as his face is being washed, but many enjoy the combat of face washing, which can be accomplished easily if the baby is occupied with water toys or is standing in the tub.

SELF-ACTIVITY

Vocalization is varied at this age. The baby has given up growling sounds. He now says "mama," "papa," "nana," "gaga," "dada." He enjoys making lip noises, vocalizing at a high pitch, and trying out a variety of pitches with some such syllable as "dada." He often stops short and laughs at his own sounds, especially the high ones.

He concentrates on inspection and exploitation of toys. He enjoys playing with a cup and pretends to drink. He brings objects to his mouth and chews them. He clasps his hands or waves them.

He recognizes the absence of objects to which he has become accustomed, such as his mother's wrist watch or a water toy. He enjoys gross motor activity: sitting and playing after he has been set up, leaning far forward and re-erecting himself. He re-secures a toy; kicks; goes from sitting to creeping; pulls himself up and may lower himself. He is beginning to cruise. He likes to roll to the side or to prone and may get caught between the bars of his play pen.

[Because of increased motor abilities it is now dangerous to leave the baby unguarded even for a moment on a bed or bath table lest he fall off.]

SOCIALITY

Though the infant will play by himself for relatively long periods, he is quick to articulate his desire for a shift of toys or company. He particularly likes to be with the family group from 8 to 10 A.M. and in the late afternoon (4 to 6 P.M.) and happily stays in his crib, play pen, or chair at these times. He also likes a carriage ride in the late morning or early afternoon—depending on his naptime.

Social activities which he enjoys are peek-a-boo and lip play (which consists of patting his lips to induce singing), walking with both hands held, and being put prone on the floor or being placed in a rocking toy.

Girls show their first signs of coyness by putting their heads to one side as they smile. This occurs most frequently in the bath.

The baby is still shy with strangers and seems particularly afraid of a strange voice.

[The baby continues to demand more of his mother than of other members of the family. He is often better when alone with one person.]

13

ONE YEAR OLD



§1. BEHAVIOR PROFILE

THE FIRST BIRTHDAY, of course, is a great occasion. The folkways call for a cake and one lighted candle to punctuate the event; and properly so, from a chronological standpoint. But biologically speaking, this birthday does not mark an epoch; for the year old baby is in the midstream of developmental changes which do not come to their fulfillment until about the age of fifteen months. It will help us to better understand his behavior characteristics if we think of him as a 15 month old child in the making.

At fifteen months the modern child has usually achieved the upright posture; he can attain the standing position unaided; he can walk alone; he prefers to walk; he has discarded creeping and begun to jargon in a manner which promises the most human achievement of all, namely speech. The year-old child is still on the way toward these abilities. He

can attain the sitting position unaided, but often prefers to creep; he can pivot in the sitting position; he can cruise and climb if he gets ample purchase with his hands. But these are quadrupedal rather than bipedal patterns. Many children near the close of the first year walk on hands and soles rather than hands and knees. This is the last of a score of stages which finally lead to the assumption of the upright posture. When feet become the fulcrum, the hands will soon be emancipated.

Nevertheless, the year-old baby is already capable of finer coordination in his eating and in his play activities. He picks small morsels of food from his tray with deft forceps prehension, and masticates and swallows with much less spilling from the mouth. Finger feeding comes before self-spoon feeding. But the year-old infant may seize a spoon by the handle and brush it over his tray. He can also dip it into a cup and release it; all of which shows that he is advancing in his mastery of tools and of the solid and hollow geometry of space. Watch his play closely, and you can tell by his self-activity what patterns of behavior are growing. One can almost see them sprout, he exercises his newly forming powers with so much spirit.

He likes to play with several small objects rather than a solitary one. He picks them up one-by-one, drops them, picks them up again, one-by-one. This behavior appears a little disorderly on the surface; but it is really very orderly from the standpoint of natural growth, for this one-by-one action pattern is a rudimentary kind of counting. It is not as complex as a counting-out game, but it is a developmental prerequisite.

The baby has another reason for this picking up and dropping manipulation. He is exercising his immature but maturing powers of release. Having learned how to grasp he must now learn how to let go. If he seems to overdo it, it is because the extensor muscles are not yet under smooth control. Hence his expulsiveness; hence also his momentary inability to let go at the right time.

But start a simple game of back-and-forth rolling ball play with him and you will see what a significant advance he has made since the age of forty weeks. At forty weeks he perhaps regarded your overtures soberly,

looking at your movements without actually reciprocating them. Instead he held the ball, mouthed it or surrendered it in an ill-defined manner. By one year his release is responsive; it has an element of voluntary imitation and initiation. In another month he releases with a slight but defined cast—all of which reminds us how complicated these simple patterns are and how much they depend upon maturation.

Socialized opportunities undoubtedly facilitate the shaping of the patterns and favor a healthy organization of accompanying emotions. The year-old child likes an audience. This is one reason why he is so often the very center of the household group. As such he shows a Thespian tendency to repeat performances laughed at. He enjoys applause. This must help him to sense his own self-identity, just as he learned better to sense a clothespin when he brought it bangingly down against his tray. He is defining a difficult psychological distinction,—the difference between himself and others.

He is capable of primitive kinds of affection, jealousy, sympathy, anxiety. He may be responsive to rhythm. He may even evidence a sense of humor, for he laughs at abrupt surprise sounds, and at startling incongruities. He may be a prodigious imitator. Demonstrate the ringing of a bell and he will wave it furiously by way of social reciprocity. But suddenly in the very midst of the waving he stops to poke the clapper with his inquisitive index! This poking was not part of the demonstration, but it is part of the child. We may be grateful that Nature has protected him with this degree of independence. After all, we do not wish to swamp him with acculturation!

§2. BEHAVIOR DAY

THE YEAR-OLD baby wakes between 6 and 8 o'clock in the morning. He usually wakes with a communicative call rather than an infantile cry. The call is a guttural "eh" or some equivalent vocalization. He may play by himself for as much as twenty minutes before he calls out. He jargons

with some excitement when his mother or caretaker arrives. He wakes up wet and is changed and toileted, and put back into his crib where he amuses himself with manipulative toys and satisfies his moderate appetite with a cracker or zwieback.

Breakfast follows in half an hour or an hour, say at 8:30. The breakfast usually consists of cereal, a strong preference being expressed for whichever kind he likes best. He eats with moderate appetite, but has a margin of self-activity through the meal. He likes to play with a toy in either hand; one toy a container and the other toy an object which he can thrust into the container. His manipulatory drive is so strong and uncritical that the dish is not safe unless it is held out of reach. At the conclusion of the meal he pulls himself to a standing position. It may be that he takes his cup of milk in this position or while he is still sitting.

He may be toileted after the meal. A morning bowel movement at this time is common. He is content to be restored to his crib where he romps and plays by himself with manipulative toys. Perhaps at 10 o'clock he is put in his play pen in the yard, if the weather permits, or on the porch, where he is self-sufficient and happy for say another half hour, when he begins to fuss, partly by way of anticipation of his morning bath which he greatly enjoys. If he kept a diary he probably would record this as the high peak of the day's routine. He prefers to sit in his bath and he is no longer engrossed with mere aquatic play.

He is ready for a nap by 11 A.M. He may prefer to take this nap indoors in a semi-darkened room. This midday nap is often two hours long. He usually wakes wet. In any event he may be toileted and changed. He is given a cracker and he looks on as his mother prepares the midday lunch. He usually takes this lunch, as he did his breakfast, in a high chair.

At 2 o'clock he is ready for a carriage ride which he enjoys, but in a manner which reflects more than 40 weeks maturity. At 40 weeks his playthings still absorbed much of his attention. Now he enjoys following the movements of pedestrians and automobiles and inspecting the landscape. He may be dry when he returns from his journey. Routinely he is again toileted.

Late afternoon again proves to be a social period. Although he has been relatively self-contained during the day, he now likes give-and-take play with adults and with children. If he is learning to walk he likes to take a walk up and down the room, hands held. Similarly he enjoys cruising from chair to chair. He is ready on the slightest cue to reciprocate in nursery games such as, "Where is the baby?", or repeatedly giving and then taking back some object. By way of conclusion of this social play he likes to climb into an adult's lap, rubbing his face against the adult's hand or giving other tokens of affection.

A supper of cereal and fruit follows at about 5:30. And so to bed at 6. As a nightcap he has a bottle which he may discard by the age of 15 months. He falls asleep between 6 and 8 P.M. which neatly completes a 12-hour cycle.

SLEEP

Night

Onset—The year old baby usually falls asleep sometime between 6 and 8 P.M. A few infants still have an eating-sleeping association. A number, however, refuse to go to bed before they are ready, then go happily and fall asleep quickly. Others go to bed at the normal time directly after supper, and play on top of their covers or walk about in their cribs before they fall asleep on top of the covers.

Waking—Most babies sleep through till 6 to 8 A.M. They may be "good" for twenty minutes after waking but more usually they call for their mother by crying or by vocalizing "eh" After calling, they seem definitely to wait for a response, and when the mother comes they greet her with excited jargon and may even look behind her as though expecting the other members of the family.

After being placed on the pot, or changed, the baby is given a piece of zwieback or cracker (which he now prefers to

a bottle). He plays happily in his crib, eating his zwieback and enjoying his manipulative toys for half an hour to an hour. Breakfast follows this play period without the baby's having made any demand for it.

Nap

Onset and Waking—If the nap follows a morning bath or an early lunch, the infant accepts it readily and goes off to sleep shortly, but if it occurs in the middle of a morning play period he shows his desire for sleep by fussing or pulling at his ears, and goes to sleep fairly rapidly after he is put to bed. As with the early morning waking he demands attention at once, is glad to see his mother, is put on the pot or changed, and may tolerate a half hour alone in the play pen with zwieback and toys before his lunch.

[If the infant interrupts his nap by crying before he urinates, it may be best not to pick him up and toilet him, for he may not go back to sleep. If he is allowed merely

to urinate in his diaper he usually falls right back to sleep.]

Periods—Usually there is only one nap a day, from 11 or 11:30 to 12:30 or 2:00. Occasionally an early morning or a late afternoon nap persists irregularly.

Place—The carriage is no longer a safe place for the nap and babies sleep better and longer in their cribs in a darkened room.

FEEDING

Self-Regulation—Gross motor drives may still be so strong that it may be easier to conduct the feeding with the baby strapped in his carriage in a sitting or standing position. If the baby is in his high chair he needs some toy, preferably two toys that can readily be combined, to occupy the margin of his attention. He does not usually demand to have the dish on the tray, where it is not safe from his grasp and would probably be turned over, so long as he has something else to occupy his hands.

Many refuse milk from a bottle at this age (or even younger), especially if some change like a shift in style of nipple has been made. This does not necessarily mean that the baby takes the milk better in a cup, for some refuse milk from a cup off and on up to 18 months or even later. The preferred bottle is the 6 P.M. bottle which may still be clung to.

Preferences for certain foods are becoming fairly well defined. Cereal may be refused in the morning but may be taken well for supper. A wheat cereal may be refused but oatmeal taken with eagerness. Or, hot cereal may be refused and a cold cereal chosen. Certain vegetables may be preferred.

Number—Three meals a day with mid-afternoon fruit juice. A zwieback or cracker may be given both on morning wak-

ing and after the nap. If a bottle is still given it is usually only one a day, directly after supper or after the baby is in bed.

Appetite—Appetite is usually good for all meals though it may be somewhat less for breakfast.

Spoon Feeding—Similar to 40 weeks. The baby shows less eagerness for food, and a margin of his attention is given to other things than food. He enjoys some finger feeding of food and may remove food from his mouth, look at it, and then reinsert it. He may rub spilled food on the tray. Toward the end of the meal he often pivots in sitting, flexes his legs on the chair seat, and may pull himself to standing.

Cup Feeding—Patterns are similar to those observed at 40 weeks, but now the baby enjoys holding his cup alone. His hands are pressed flat against the sides or bottom of the cup. His head tilts backward to enable him to drain the last drop.

[If only an ounce or two is given in a cup the baby can have the satisfaction of finishing it.]

Self Help—The baby usually finger feeds for part of one meal, either lunch or supper. A few boys, of a dominant but emotionally dependent type, demand to feed themselves at this age. They absolutely refuse any help even though they need it and results may be very messy. These same boys often ask for help at 2 to 3 years of age.

ELIMINATION

Bowel—One to two movements a day, at 8 to 9 A.M. and during the afternoon. The infant may respond to a pot if the bowel movement occurs directly after breakfast. "Successes" on the pot are less frequent than they have been and more resistance is expressed. An earlier indication that the bowel movement is about to take place

(grunting) is no longer present, but the baby may fuss to be changed after the movement occurs.

Bladder—Dryness after nap, and occasionally when the baby awakes during the night and in the early morning, if he is put on the pot immediately after waking, is more frequent now, though some have relapses. Girls often laugh as they urinate, from 40 to 52 weeks, are interested in the process of urinating and look in the pot afterward to see what they have done. They may want to put their fingers in the urine or to put toilet paper in the pot, and may desire to flush the toilet. Fussing to be changed is beginning to be the rule though some show delay in this response.

BATH AND DRESSING

Bath—Bath is still a favorite part of the day's routine. It may be given at any time of the day that fits best into the household schedule, often in the late afternoon. Most babies prefer to sit in their baths at this age, and are no longer absorbed by play with the water or by their own gross motor activity. They are now interested in the washcloth, the soap, and water toys. They grasp and release these objects in the tub or extend them outside the tub, for instance dabbling water onto the floor from the washcloth.

[Bath toys can be controlled more easily than the washcloth. If the baby refuses to give up the washcloth he can often be induced to place it in a container which can then be put out of sight.]

Dressing—Hat, shoes and pants are the chief interests in dressing, and there is more interest in taking off than in putting on. When asked if he wants to go bye-bye (out for a walk), the baby may pat his head to indicate his desire for a hat. Shoes are

played with for themselves and their laces, as well as for the pleasure of taking them off. The infant of this age is beginning to pull his pants off by himself, especially if his diapers are soiled or wet, and he is alone in his crib. This does not occur often. He now cooperates in dressing, putting his arm into an arm-hole or extending his leg to have his pants put on.

[A baby with an excessive drive to walk with his hands held may be inhibited, after he has had sufficient opportunity to express this drive, by taking off his shoes. His attention immediately turns to playing with the shoe, and walking is forgotten.]

SELF-ACTIVITY

The baby enjoys gross motor activity in his play pen and crib, pulling himself to standing, cruising, standing alone, creeping. He enjoys creeping on the floor, rather than in the play pen. He will usually be good in his play pen in the backyard or in the house for an hour in the morning, occupied with gross motor activity and with playthings. He enjoys placing things on his head, such as a hat, basket, or cup. He often throws things out of the play pen and then has difficulty in re-securing them.

Activities most enjoyed are gross motor activities; putting objects in and out of other objects (for instance putting clothespins in and out of a basket); and play with buttons, which consists of looking at the buttons and fingering them.

[The Taylor-tot device may prove useful for those babies whose sitting and creeping are poor but who like to stand.]

SOCIALITY

Fifty-two weeks is the heyday of sociality. The baby enjoys social give and take,

ONE YEAR OLD

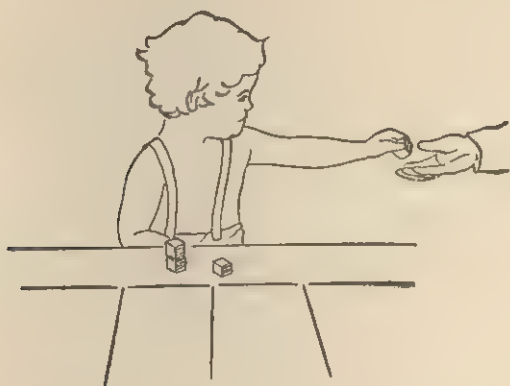
and social occasions are apt to come about spontaneously, without planning. He is usually out alone in his play pen during the morning, though there may be some play with the family group. Most of his sociality, other than in relation to regular routine, occurs in the afternoon. He enjoys his carriage ride—enjoys standing up in his harness, and is especially interested in moving objects such as automobiles or bicycles. His playthings no longer absorb his attention.

He enjoys walking with his hands held, and loves the game of being chased while creeping. He enjoys hiding behind chairs to play the game of "Where's the baby?"

or waving "bye-bye." He is interested in opening doors. He says "eh" or "ta-ta" as he gives something to an adult, but he expects to have the object given right back. He throws things to the floor with the expectation that they will be restored to him. He whimpers or cries when things are taken from him.

He enjoys rhythms. He may be inhibited by "no-no" or may enjoy a game of smiling and laughing and continuing his activity in spite of such admonitions. He may be just coming into a period of being shy with strangers, or if he has gone through this period he may be friendly again.

FIFTEEN MONTHS OLD



§1. BEHAVIOR PROFILE

AT ABOUT FIFTEEN MONTHS of age the American baby becomes something more than a "mere" infant. He is discarding creeping for toddling. He is discarding his nursing bottle in conformance with cultural custom. By virtue of other cultural pressures, he says "ta-ta" on more or less suitable occasions; by gesture language he calls attention to wetted pants; he makes an imitative stroke with a crayon; he helps to turn the pages of a picture book, albeit several leaves at one swift swoop. Numerous patterns which were in the making at one year now come to relative fulfillment. He is ready for a new chapter of acculturation.

But having graduated from "mere" infancy, he does not by any means settle down. On the contrary he seems to feel and to exercise his newly formed powers almost to excess. He becomes demanding; he strains at the leash. While being dressed he may have to be bodily held. In his chair

he stretches forward importunately for things out of reach. He wants to hold and carry something in each hand. He is beginning to insist on doing things for himself. He likes to take off his shoes. He likes to empty and at least to overturn waste-baskets, not once but many times. If he is not equally ready to refill the waste-basket, it is because his nervous system is not quite ripe for this higher pattern of behavior.

For the time being, his gross motor drive is very strong; he is ceaselessly active, with brief bursts of locomotion, starting, stopping, starting again, climbing, and clambering. He likes to go out for a ride by automobile or by baby carriage, but even then he is prone to stand up and to be on his own self-activated move. If confined to a pen, he is very likely to throw out his toys.

Casting is a very characteristic trait. And what is casting, but emphatic release? The voluntary power to release hold of an object is a complicated action pattern which requires an elaborate development of the controlling nerve cells of the brain. It takes time to bring about these developments; the child must learn to modulate his release, to time it accurately, to make it obedient to his intentions. Like any other growing function, it needs exercise,—practice as we say, although the practice is primarily a symptom rather than a cause of the growth.

The year old child could poise one block over another; the 15 month old child can let go of the block, neatly enough to build a tower of two. Likewise he can release a tiny pellet into a bottle. The maturing power of release also enables him to play a better to-and-from game with a ball. Indeed, he can throw it after a crude, casting fashion. At 18 months he can hurl it. Even primitive man was once awkward in hurling stones. It takes years of neuro-motor organization before a child can throw in a mature manner. Casting is a rudimentary first step in the development of this complicated ability. It must be a very important action pattern, or it would not figure so strongly in the behavior traits at 15 months of age.

We have said that the 15 month old child is "demanding." Perhaps it would be more accurate to say "assertive"; because he is not so much

demanding things of us, his caretakers, as he is demanding things of himself: he is asserting his embryonic self-dependence. He wants to help feed himself. He grasps the cup executively with both hands (and of course tilts it to excess). He boldly thrusts his spoon into his cereal and, upside down, into his mouth (of course with spilling). It will take almost another year before he inhibits the turning of the spoon in this manoeuver. (It took primitive man a long time to master the principles of the lever.) The significant demands are those he makes upon himself.

Now, as always, it is necessary to achieve a working balance between the individual and society. The danger is that the culture itself will place too heavy repressions upon this growing organism which is graduating from mere infancy. He does not enjoy the same kind of protectiveness which he had at the age of one year. The 15 month old baby is at the threshold of behavior capacities which already foretell nursery school and kindergarten. He is dimly aware of pictures in a book; he can fit a round block into a round hole; he jargons and gestures; he is actually beginning to build a little with blocks; he can imitate a stroke of crayon upon paper; he is no longer a "mere" scribbler. These are foretokens of his educability, but he is still very immature.

The temptation may be for the adult carriers of culture to press him too fast and too heavily in the direction of civilization. It is well to remember that Nature requires time to organize his burgeoning neuro-muscular system,—postural, manual, laryngeal, and sphincter. Everything in season!

§2. BEHAVIOR DAY

THE PATTERN OF THE BEHAVIOR DAY is changing. It shows the accumulative effect of cultural impress. Even at 15 months, although the child still needs constant care, he is not as much a baby as he was at 12 months. Our illustrative 15 month old child wakes between 6 and 8 o'clock in the morning. He does not demand to be changed even though he wakes wet. Nor does he need toys. He is content with simple self-improvised manipu

lative and postural play in his crib. But when he hears someone stirring, the pattern suddenly changes to alert anticipation, which becomes overflowing joy as soon as his mother or caretaker greets him. He is now very sensitive to visual and auditory cues which have a social meaning.

The task of dressing him may fall to the father. The baby enjoys the tug and pull of dressing.

He is now capable of bipedal locomotion and so he walks to his breakfast. (This is a new behavior day event.) He nibbles his zwieback while he observes the family breakfast, and at about 8 A.M. is ready for his own, usually stationed in his high chair. His morning appetite is strong. He accepts being fed with a spoon, and demands that the dish be left on the tray. His motor drive is under better control so that the dish is now safe on the tray though it may need to be guarded. He likes to hold the spoon and likes to dip it occasionally into his cereal. He is more competent with the cup.

At about 9 o'clock he is changed and toileted. He is not likely to resist toileting at this age. He is then returned to his crib where he amuses himself with manipulative toys,—a ball, a doll, a tin pan, clothespins, or containers of various sorts. Vigorous hurling, banging or casting of toys may be a signal for a change of scene. He is transferred to a play pen. At 12 months he was quite content when the pen was in the rear yard. Now he prefers a play pen in the front yard or on the front porch. He likes to watch the traffic. He is about to graduate from the play pen and the scope of his interest is widening. He likes to look into the neighbor's yard or onto the neighbor's porch, particularly if on this porch there is another play pen with another preschool child. This tendency to penetrate beyond the pen can be anticipated by placing some of his toys outside of the pen. He manages to pull these toys into the pen and having secured them in this manner he is probably a little less likely to cast them out. Casting, however, is a developmental, and not a regrettable, behavior pattern.

He plays contentedly until about noon, when he is ready for his mid-day lunch. He definitely wants this lunch. He is not too much interested

in preliminaries, but he is a little more eager to contribute his own self-help during this meal, even though the spoon is likely to enter his mouth bottom side up. He is quite ready to accept help in feeding toward the end of the meal, although he may insist on holding the cup to drink his milk or water.

At about 12:30 he is toileted and may have his first or second bowel movement, after which he is returned to his crib. The effects of acculturation now become evident. Typically he makes no protest against the impending nap. He snuggles down under his covers. He likes to watch the shades go down. He is happy to be in bed and with an inflection of satisfied conclusiveness he says, "there," or "bye-bye," and falls off to a sleep of an hour or two.

He is quite likely to wake wet. He is changed and toileted. He usually wakes in high mettle, eager to get out of his crib to continue with his behavior day. Already he is making definite associations between times and events. He is building up a sense of his own behavior day which was scarcely present in earlier infancy. He realizes that he will soon be enjoying a trip in the carriage and he waits with a certain degree of patience before the journey,—the patience being supported by a cracker which he munches while he waits.

Having arrived in the park or in a neighbor's play yard, he likes to be set free on the wide expanse of a lawn or a sidewalk. He indulges in a diversity of play, postural and manipulatory. Somewhat acrobatically he bends over and looks between his legs; he picks up sticks and strokes the dirt; hands them to an adult with an inflected "ta-ta" and does not expect a return as he did at 12 months. He jargons; he has a more sophisticated interest in his own sounds. Where formerly he was somewhat startled by them, he now listens to them suggestively. In his jargon he thus communicates with himself as well as with others.

He returns home at about 4:30 and continues his characteristic play activities, utilizing the apparatus of the living room, with a special interest in all containers, particularly waste-baskets. But he also likes to listen

to music, to dance in rhythm to it, or even with the help of an adult to look in brief snatches at a picture book.

The daily bath may come at 5 o'clock. It is preeminently a play period. He likes to continue in his bath for a quarter of an hour. A favorite activity is the pouring of water from a receptacle.

Supper follows. He helps a little in the feeding but amiably accepts administered feeding. Supper over he likes to come back to home base in his mother's lap or his father's lap, giving tokens of affection. He holds out his hand to have it kissed or caressed. And at about 6 o'clock he is again happy to be back in his crib for a sleep of some twelve hours. He is making increasingly definite person to person contacts, and after he has been tucked in bed he extends his hand through the palings for a good-night greeting.

The fact that we have so many greeting and intercommunication patterns emerging during the course of a single day at 15 months is a convincing reminder that acculturation is well under way and that much still lies ahead.

SLEEP

Night

Onset—Bedtime now comes between 6 and 8 P.M. and follows the happenings of the day in a regular, orderly fashion. The order, for instance, may be supper, bath, bed. The baby seems to have acquired a sense of "time to go to bed," an expectation that going to bed will follow certain events on the day's program. (At a later age this order and timing may change.) There may be initial crying by some, but most seem to have a feeling of being glad to be back in bed again. There may be talking for half an hour to two hours. The more active children may crawl out from under the covers and may be very active in their cribs until they finally fall asleep, perhaps at the foot of the crib.

[If falling asleep has been delayed, it is better not to go in to the child until he has fallen asleep or is nearly asleep. Otherwise the presence of the mother may stimulate him and further delay his falling asleep.]

Waking—Night waking is largely an individual matter and more common with the active child. Many children awake crying (more frequently before midnight) and are usually not quieted merely by being held. They can often be quieted by looking out of the window at lights, or by having someone play "This little pig went to market" with their fingers and toes. It is unwise to put them back to bed before they are ready, and the transition may often best be accomplished with a cracker, or by letting them hold something like a toothbrush

which they may have fastened upon in the bathroom.

Morning waking occurs between 6 and 8 A.M. The child is usually good at this time, lying under his covers and talking to himself. He may later crawl out from under the covers and play around in his crib, without the need of toys.

Nap

The nap usually follows a noon lunch. A common indication of the child's readiness for sleep is his trying to get off his shoes. He usually settles down at once and goes right to sleep. A few children delay sleep, and play for a few minutes with toys before settling down on top of the covers. They awake after a two to three hour period and are ready to get up at once.

FEEDING

Self-Regulation—The gross motor drive is now under much better control than formerly. The child is able to sit through his meals, and commonly demands to help feed himself. Boys still lead in these demands. They do an especially creditable job with finger feeding, and this is definitely their preferred method of feeding. They still are apt to turn the spoon en route to their mouths, and are thus apt to spill the contents of the spoon unless the contents stick to the spoon. With fatigue they are more apt to allow the mother to feed them.

An even more usual demand is to hold a spoon and dip it into the food in the dish, which is now safe on the tray. The child accepts being fed as long as he is happily occupied. Spilled bits on the tray are usually finger fed. Many children differentiate as to the preferred method of being fed at different meals. Breakfast may be accepted

without any demands for self-feeding. Lunch may be accepted partially, with some demands for self-feeding. Supper may be completely taken alone, with the one possible exception when the child may allow his father to feed him. Many also enjoy feeding the father or mother and may do better at this than at feeding themselves.

Those who have clung to their evening bottle—either on their own demand or because their parents have felt it is the surest and easiest way to insure an adequate milk intake—most frequently have this bottle on going to sleep and often call it "ba-ba." They may even ask for it in anticipation of going to bed.

Preferences and refusals have their ups and downs but are on the whole quite similar to the patterns described at 1 year of age.

Number and Appetite—Same as at 1 year of age.

Spoon Feeding—This is an age when a large majority of children make some demand to participate in meals and want to have a try at the spoon. They grasp it pronately near the bowl, and have difficulty in filling it since they dip it rather than scoop it into the food. What sticks to the spoon is then carried to the mouth, but the journey to the mouth is a hazardous one and the spoon may be turned upside down and the little contents there are may be spilled. If it does reach the mouth right side up it is usually turned after it is inserted. The free hand is quite inactive and only comes in to help in an emergency. The child usually allows his mother to feed him so long as he is allowed to do some of the feeding himself.

[The child will often best accept help from the mother if she fills his spoon from her spoon, and then supports the handle of his spoon as he lifts it to his mouth.]

Cup Feeding—The child now enjoys manipulating the cup by himself, grasping it more with thumb and forefinger or with the tips of his fingers. He drinks more continuously (five to six swallows) and now tilts his cup by the action of his fingers rather than by the tilting of his head. However he is apt to tilt the cup too quickly so that some spilling results.

[Though the child demands to hold his cup alone, he may allow his mother to help by holding her finger under his chin to restrict the wide excursions of the chin.]

Self Help—Demands are similar to those expressed at 1 year with the addition that a demand to spoon feed is coming in and the child may insist on feeding himself one whole meal, preferably lunch or supper.

ELIMINATION

Bowel—One or two movements a day, though occasionally a day may be skipped. With some children it still occurs in the morning, either on waking or around breakfast time. With a few it has shifted to a more consistent afternoon pattern, either after lunch or in relation to the nap. A resistance to the pot common from 12 to 15 months is now giving way to an acceptance. If the child is put on at a favorable moment such as after a meal—usually breakfast—he may have a bowel movement easily on the pot. However at other times he will not “go” until he is removed from the pot even though he remains contentedly on it for as long as he is left there.

Another favorable time is when the mother observes that the child has suddenly become very quiet, or when he looks at his mother, or stoops as he grunts. He is beginning to be conscious of a bowel movement in his pants and may fuss, say “uh,” or grasp at his pants to indicate his

desire to be changed, especially when he is with an adult. He is less demanding of attention when he is in his crib or play pen and may even try to take off his pants by himself.

[Occasionally episodes of stool smearing may occur at this age, when the child is alone either in his play pen or crib. It is important that his clothes should fit securely and also that he be watched, preferably without his seeing the adult. Then he may be cared for immediately after he has had his movement.]

Bladder—The child may be dry after his nap if he is taken up immediately. At this age he appears to be more conscious of being wet than earlier. If he is in training pants and makes puddles on the floor, he may point to the puddles, use a special word such as “tee-tee” or “pee-pee,” or may just say, “see.” He may splash his hands in the puddle and may be interested in mopping it up with any nearby cloth. He responds fairly well to being put on the toilet, especially at favorable times such as after meals and before and after sleeping periods. He may not urinate until taken off the toilet, which also occurs with the bowel movement. Resistance to the toilet is shown if he is put on when he does not need to be, or during the mid-morning and the mid-afternoon. Some children may now be (temporarily) increasing their span to two or three hours.

[A “potty chair” may be the most successful toilet equipment at this age, particularly for those children who like to do things for themselves.

Since many children will not urinate or have a bowel movement until after they are removed from the toilet, it is best not to leave them on too long. Leaving them on for longer periods will not produce the desired results.

Punishment for wetting has little or no effect. If the child is punished, he is apt to stop telling after he is wet. Dressing him in diapers and rubber pants is preferable.

If the child resists being placed on the toilet, his resistance should be respected.]

BATH AND DRESSING

Bath—Now that the nap is usually in the afternoon, and supper is at 5 o'clock, there is little time for the bath in the afternoon. It may be best to postpone it till just before bedtime. Then it is heartily enjoyed, especially if it is taken with an older sibling.

Washcloth and soap are still grasped. Water is often sucked from the washcloth, or the washcloth may be placed on the head like a hat. Favorite water toys are containers such as cups or watering cans. The child may try to drink the bath water. He may fuss when taken from the tub but usually quiets when given some distracting toy.

Dressing—Dressing can be very difficult at this age. The child's attention is usually on other things. This is the age when the parent needs to hold the child tightly and pour him into his clothes. In the morning he may be dressed best on his mother's lap with the mother seated beside the crib so that he may reach for and occupy himself with his toys. Or he may be dressed standing on a high restricted place with a shelf at chest height for his toys.

His chief clothing interests are still his hat, shoes, and pants, and these are usually in relation to specific times: the hat when going out, the pants when soiled or wet, and the shoes when he is sleepy and ready for his nap.

[After waking from his nap his chief interest is often to go outdoors, clothes or

no clothes. Therefore dressing him near a window or open door, if weather permits, may make the ordeal less difficult. Giving him a cracker often helps.]

SELF-ACTIVITY

The child occupies himself happily and contentedly at the following times: until he is picked up in the early morning; for an hour in his room or crib; and then for another hour out in his play pen in the morning. He cannot stay too long in one place at one time and enjoys a shift. His demands increase as the day goes on. He does not demand toys on waking, but plays happily, with gross motor activity. He wants his toys when he is returned to his room and he likes a little action, such as watching traffic or seeing people walk by, when he is out in his play pen. His favorite playthings are balls, spoons, cups, clothespins, boxes, and some fitting toys. His best play with toys often occurs in his room from 9 to 10 A.M. after his early gross motor workout. Then he puts things into things and takes them out again, throws balls and goes after them, and with fatigue throws his playthings out of the crib or play pen or puts them behind him.

SOCIALITY

The shy period which occurs at 1 year has usually passed, and the 15 month old child is eager to go out into the world in or with his carriage. Some still sit or stand in their carriages and especially enjoy the noises of the world. They hear a dog bark, a horse trotting, the whirr of an airplane. A sudden sharp noise may even cause them to whimper. They watch, too, but more than that they listen. Some, whose gross

motor drive is strong, fuss to get out of their carriages after fifteen to thirty minutes, and wish to push the carriage themselves.

An hour's carriage ride is quite enough at this age. The 15 monther wants to be about his own intimate business of walking, stooping to pick up sticks, bending over to look between his legs, bringing odds and ends to the adult, and exercising what small vocabulary he has. He delights in dogs and often says, "bow-wow." He enjoys imitating smoking, coughing, nose blowing or sneezing, and blowing out matches.

In fact he is becoming so aware that he has to be restricted in his activities. He is apt to demand anything in sight if he is at the table. He is "into everything" in the living room and no longer plays the game of "no-no," but boldly demands his own

way. If he plays in the living room, things must be put out of reach. His primary interest in the living room, however, is the waste paper basket. His eyes search around a living room and seem invariably to pick out waste paper baskets. He enjoys pulling things out, and less often, putting them back in.

Toward the end of the afternoon he may enjoy looking at colored pictures and turning pages, and may also respond to rhythmic music with the swaying of his hips.

[When the child makes demands which cannot be met—such as a demand to walk in some forbidden place—he may respond favorably to being picked up. The shift in posture seems to cut off the demand at once.

Some children will not accept things directly from the adult hand but will accept things from a container.]

EIGHTEEN MONTHS OLD

§1. BEHAVIOR PROFILE

THE EIGHTEEN MONTH OLD is so charged with run-about compulsions that he prefers to push his baby carriage rather than ride in it. His locomotor drive is so strong that he is constantly running into nooks and corners and byways, or going up and down stairs by one device or another. For the same reason he likes to chase and be chased. He is constantly introducing variations into his movements, as though he were trying out the versatilities of his motor equipment. He walks backward, he pulls his carriage backward. He does this partly because he is "learning" to shift the gears of his physiological automobile,—namely, his nervous system. This neuro-automobile is far from complete. He can start and stop pretty well (when he is so minded!); but he cannot turn corners; and he will have to double his age before he can pedal his tricycle or stand on one leg.

He has not even fully attained the upright posture. He walks on a broad base, feet wide apart; he runs with a stiff, propulsive flat gait. He squats a good deal; his abdomen is rather prominent; his arms extend out bi-laterally from the body, almost like flippers; he uses whole arm movements in ball play and "painting"; his hands are not agile at the wrists; he has difficulty in coordinating hands and feet. He even has trouble getting his spoon to his mouth.

He lugs, tugs, dumps, pushes, pulls, pounds. When he seizes a teddy bear he clasps it grossly to his chest. He is also something of a furniture mover. Gross motor activity takes the lead over fine motor. There is a primitiveness about his postures and manipulations, as though a reminiscent touch of the stooped Neanderthal man were still upon him.

But there is no reason to despair. At two years he will be more nimble at the wrists, and will turn the pages of a book singly! Even now he can take off his shoes, hat, mittens, and unzip a zipper, if it is not too fine. Much more will come soon enough. At three he will put on his shoes; at four he will lace them.

His attention, like his body activity, is mercurial. He attends to the *here* and the *now*. He has little perception for far off objects. He runs into them headlong, with meager sense of direction. You may talk to him about the future, but he will not listen, because for the time he is color-blind to the future. He is immersed in the immediate; but even now the push of growth is lifting him out of the immediate by giving him a sense of "conclusions."

This spontaneous interest in conclusions is one of his most interesting psychological characteristics. He likes to complete a situation. He puts a ball in a box and then utters a delighted exclamatory "oh" or "oh my!" in a burst of conclusive satisfaction. He likes to close a door; to hand you a dish when he has finished, to mop up a puddle, to flush the toilet, to "tell" after he has soiled himself. When he sits down in a chair it is with a decisive manner, as though to say, "now, that's done."

These are elementary judgments, even if they are not yet put in words and sentences. He is th with his body rather than with his larynx,

and his mind is already operating on a distinctly higher level than it did at one year. His attention is sketchy, mobile, works in swift, brief strokes. In his play he likes to carry objects from one place to another. In this way he learns what a place is. He even likes to put things back in place,—an embryonic orderliness soon outgrown. But this bit of behavior is a good reminder that a great deal of organization is going on in spite of the apparent aimlessness of his activity. How can you discover without exploring? And how can you explore without traveling? And how can you find out where you started from without going back? So there is a logic, after all, in this back and forth behavior,—the logic of development.

This logic cannot be hastened by words. The child must begin with a practical logic. Things must be acted out first. He has only about a dozen words at his command. He relies on a more abundant vocabulary of expressive gestures and odd little clucking sounds (again reminiscent of a very primitive human). Favorite words are "all gone," "thank you," "bye-bye," "oh, my,"—all of which register completions. He responds to a few simple verbal directions, but he must be managed chiefly through things rather than words. If he is to remain still, he usually must have an interesting object in his hands. The manipulation of this object serves to drain his locomotor drive. Music may do the same thing. He will stay on the spot, and sway accompaniment with whole body rhythm. He may hum spontaneously. If he attempts singing, it is by repetition of a single word. He is not very sedentary, nor ready for the finer arts, though he likes to stroke in the dirt with a stick.

With such an action system, and with such very elementary insight into time and space, we do not expect elaborate or refined interpersonal relations. It is doubtful whether he even perceives other run-about children as persons like himself. He pulls, pinches, pushes and strokes them as though they were objects for manipulation. He is quite content with solitary play, back to back with one of his contemporaries.

And yet he is laying the basis for a more intellectual grasp of what another person is. He does a great deal of watching. He learns by looking a hundred times a day. It is by brief strokes and spans of attention but

they count up. Sometimes he even imitates the wonderful adults upon whom he gazes: he crosses his legs; he reads a newspaper! He likes to play more elaborate peek-a-boo games; to hide and be found. This reciprocal kind of play helps to build up an identification of himself as distinct from, but like others. If he seizes a broom to sweep, he holds it by the end and shoves it shovelwise, a reminder of how much he still has to learn about spatial as well as human relations.

§ 2. BEHAVIOR DAY

THE EIGHTEEN MONTH OLD child is relatively self-contained even though he is often described as a run-about. He wakes between 6 and 8 o'clock in the morning and plays contentedly until his mother arrives. He greets her, but not with the bubbling and excessive overflow of even three months ago. He is changed and restored to his crib with a cracker and toys. He is content to play for half an hour or more until breakfast, which comes at about 8:30, and may not begin until the father has left home. Breakfast is often served on a low chair and table unit. He likes the confinement of such a unit. He accepts feeding by his mother although he insists on holding his cup while he drinks.

After breakfast he is toileted. He may have a bowel movement, but irregularity is quite typical of this age. If it is summer time he spends a play period from about 9 to 11:30 out of doors on the porch or in a protected corner of the yard. If his enclosure gives him a free run so that he can exercise his locomotor abilities and if it is provided with a sand box and other toys, he is quite content to remain in it. He needs only marginal supervision. It may be necessary to go to him if he falls or cries, and he reacts favorably to shifts of toys when needed. He is so busy and preoccupied with his play activity that he does not need to be changed during the course of the morning. His rubber pants serve their purpose, and if he is interrupted he may resist toileting.

The noon luncheon may be served in his room. He is more insistent

on helping himself at this meal. After luncheon he is toileted and is soon ready for his afternoon nap of, say, two hours. He wakes happy and cheerful from this nap. He is anxious to be up and doing. He is even interested in dressing to the extent that he helps with socks and shoes. However he is more skillful at undressing than at dressing.

After a snack of juice and crackers, he is taken out for a ride in his carriage. He does not like to stay too long in the carriage and is happier to get out and push. He may have to be restrained in a harness. He returns home willingly by carriage and plays perhaps for a quarter hour in the living room, dancing to the radio, looking at magazines, playing with the wastebasket. Being relatively self-contained, he is quite agreeable to being left in his room with the gate closed while his mother prepares supper.

Supper comes at about 5 o'clock. Having had his fling of self-feeding at the noon meal, he accepts a measure of help at the evening meal. He is toileted again and may have a second bowel movement.

His daily bath comes a little before 6 o'clock. He enjoys it as he did at 15 months but he is somewhat less reckless in his play, more sedate and more wary. After his bath, he joins his father for a brief period of good-night play.

Shortly after 6 o'clock he is put to bed with his teddy bear, to whom he jargons more or less sociably. In spite of his locomotor capacities, he stays under his covers and falls asleep sometime between half past six and eight, to awake in the morning for another active day.

SLEEP

Night

18 months—Bedtime still comes between 6 and 8 P.M. The child of this age likes to take some of his toys, as his teddy bear or his own shoe, to bed with him. He may play for a while with this object before dropping off to sleep, usually under the covers. Evening or night waking occurs in-

termittently and is usually associated with an active or too exciting day. He is easily quieted by being talked to, given a drink, or toileted if that is necessary.

He wakes between 6 and 8 A.M. He usually stays under the covers, talks to his teddy bear or plays with his shoe, and when he feels that it is time to get up, he may fuss or call. He is happy to see his parent and is eager to be taken up.

21 months *—Sleeping up till now has gone quite smoothly, but this is often the beginning of a period of sleeping difficulties which may continue through 30 months. Difficulties occur not only on going to sleep and during sleep, but also on waking. Difficulty is especially evident on going to sleep, when the child though he seemingly has settled down with a book, doll or teddy bear, then calls his mother back for the first of numerous demands for toileting, a drink, a handkerchief, a kiss, or anything that comes into his mind. Sleep is more disturbed at this age and there is more night waking, but the child usually quiets readily after being toileted, or given a drink or a cracker. A few children remain awake talking to themselves for an hour or more, early in the morning. Total sleeping time is further cut down by the fact that they wake earlier in the morning than they did when they were younger. They are apt to fuss, but if the mother goes to them and cares for them they may go back to sleep for an hour or more.

Nap

18 months—As at 15 months, the nap follows the noon meal. The child may or may not take toys to bed with him, but is often so ready for bed that he goes right to sleep. A few children, as at 15 months, may delay sleep. The nap lasts for 1½ to 2 hours. The child usually awakes happy and wants to get right up. Occasionally he awakes crying and then responds best to a motor workout of running about before being toileted.

21 months—As with night sleeping, there is difficulty in release of consciousness, but

most children play well by themselves and do not call their mothers. Sleep may be delayed an hour or more and is finally induced only by the mother's putting the child under the covers at an opportune time. He sleeps longer (2 to 2½ hours) and although he usually awakes happily he may awake fussing. If he fusses it is best to let him take his time and awaken slowly.

FEEDING

Appetite—Appetite may be decreasing and is usually less than the robust infant appetite. The noon meal is frequently the best meal. Appetite for milk from a cup is less than appetite for milk from a bottle.

[If giving milk from a cup instead of a bottle has markedly reduced the amount which the child will take, it may be better to continue at least one bottle a day.]

Refusals and Preferences—*18 months*—Refusals and preferences are fluctuating and not clearly defined.

21 months—Preferences are becoming more positive. If canned baby foods have previously been given, the child may demand the continuance of a specific brand.

Spoon Feeding—Grasp of the spoon is prone. The baby holds the spoon horizontally, raises his elbow as he lifts the spoon to his mouth. The spoon is aligned to the mouth half-point, half-side, and may turn after it enters the mouth. The free hand is ready to help as needed, pushing food on the lips into the mouth or placing spilled food in the spoon. The child may even carry food from the dish with his fingers and place it in the spoon bowl before putting the spoon into his mouth. Discrete particles such as peas and pieces

* The age level of 21 months is a transitional age. It has not been given separate chapter status, but is separately discussed in this section under the six behavior day categories (Sleep, Feeding, Elimination, etc.)

of meat are preferably finger fed. Food that cannot be swallowed is removed from the mouth.

The child cleans off the spoon well by tilting the spoon handle upwards as he removes the spoon from his mouth. He adjusts his head as with cup feeding. There is a lateral chewing movement of jaw and tongue. The tongue selectively licks in bits of food from the chin or the side of the mouth.

Cup Feeding—The child holds the cup with both hands, holding and tilting it securely. He now has good control of his fingers as he tilts the cup, and spills very little. As he comes up for air he exhales audibly. He soon returns to drinking and usually finishes his glassful. The hazard in cup drinking lies in the fact that when through drinking the child automatically extends the cup to his mother, and if she is not there or does not come at once when he calls, he is apt to drop the cup or to throw it across the room.

Self Help—18 months—Most children enjoy feeding themselves and may be able to handle all three meals. The mother may need to help fill the spoon. Some children, who have previously expressed occasional desire to feed themselves, may now prefer to be fed. Each dish is handed to the mother as it is emptied. Cup drinking is handled entirely by the child, except for the mother's accepting the cup.

21 months—If the child feeds himself, he eats better alone, with his mother moving about the room but not paying attention to him until he calls. If more than one dish is on the tray, he loves to pour things from one dish to another. He is not really able to handle more than one dish at a time. He likes to have patterns repeated—the same bib, the same spoon.

[Since the child at this age is sensitive to peripheral stimuli, it is important not to have his meal interrupted by small or large distractions. The dessert within sight, too much interference on the part of the mother, or the father coming home—any of these may serve to interrupt and perhaps terminate his meal. It is therefore often easiest to control such stimuli by feeding the child alone in his own room.]

ELIMINATION

Bowel—18 months—There is a variety of times and contexts for the bowel movement at this age, but each child is fairly consistent to his own pattern. However, at this age fluctuation and incompleteness are the rule. Therefore, any one child may set up a meal relationship for a time, then shift to midmorning, then to midafternoon. This makes successful "training" difficult. The child is beginning to request the toilet either by a word or by fetching his pot, and often the mother may judge by his unusual quietness that he is about to function.

There appear to be two distinct types of children, one with a close meal association with the bowel movement; the other more irregular and functioning at some time between meals. Those who have a meal association are usually trained more easily. The two daily movements usually occur after breakfast and after supper. These children often have a high language ability and refer to the bowel movement by name, i.e. "pot," "pee-pee," "toidy,"—a word which is not different from that used by them for urination. These words are more commonly used after functioning than before.

Those who have an irregular time of functioning commonly have their move-

ment when alone, most commonly in the midmorning, and preferably standing at their playpen or crib rail. They usually want to be changed, and therefore may tell afterwards by making a meaningful sound ("uh-uh" or "k-k"). Or, they may merely gesture by pulling at their pants. These children usually resist the toilet and often have occasional episodes of stool smearing, initiated as they try to take care of themselves when alone in their playpens or cribs. If they do respond to the toilet in the morning they frequently do not finish, and then they may have one or two more movements in their diapers throughout the day, particularly when they are alone.

21 months—Similar to 18 months. More smearing episodes occur, especially after naps. Some children still refuse the toilet while others are completely trained, especially those who have a regular time. Some who have been well trained earlier, often have a relapse at this age, associated with a diarrheal episode. This may be related to teething, but may also be related to a new but too powerful release mechanism. Many are reported to have an explosive bowel movement which indicates a forceful casting release mechanism.

They are also quite conscious of the process and the product. Often if they soil their diapers, they seem unable to move, and stand screaming in distress, and continue screaming while they are being changed. This response is not necessarily related to any previous punishment. Sometimes they are able to inhibit release when it has started too soon, which may also bring on a screaming response. When they are successful in responding to the toilet they are often overjoyed at their success.

Some children, chiefly boys, are unable

to have their bowel movement unless they are completely undressed. This may be associated with the 21 months' tendency to undress and to run about naked.

Bladder—18 months—Most children do not object to the toilet at this age if they are not put on too often. They may even enjoy sitting on it. However there are some who still resist strenuously. Some children now take the initiative themselves by occasionally asking in advance, in which case they use the same word that they use for bowel functioning. Or they may fetch the pot. They respond best to being asked whether they want to go, before they are taken. Their answer is usually quite accurate. The response to the toilet is fairly prompt.

If the child is in training pants and makes puddles on the floor, he continues to point to them saying "See," or "pee-pee," and enjoys mopping them up. This is the age when punishment and shame are often introduced by the adult, since something in the child's awareness makes the adult feel that the child could have done better. If punishment and shame are used, the child will point to the puddle and say "ooh-ooh" as though it were quite awful; and when asked, "Who did it?" he may blame it on the cat or on his grandfather, and when further asked if he did it himself may reply, "No, nebbber." Another shame response is to show undue and sudden affection toward the mother just after wetting.

The child is increasingly dry after his nap, but still more frequently wet than dry. Keeping dry may depend on how quickly he was put on the toilet after waking.

This is an age when picking the child up at 10 P.M. for toileting is often started.

He is usually wet at this time, and may not awaken when changed or put on the toilet. He may, however, resist the toilet, in which case this practice should be discontinued. The child is usually wet in the morning even though picked up in the evening, but a few are consistently dry on waking with the help of this 10 P.M. toileting.

[Because bladder control is in a transition stage, it is still best to keep the child in diapers or in padded training pants and rubber pants, especially during the morning play period when he does not like to be disturbed, and during the night when they may prevent him from feeling wet and waking up. Training pants plus rubber pants are more comfortable, and if the child is away from home he may need them since he is apt to refuse to respond to a strange toilet.]

21 months—Though the child may resist the toilet at specific times when he does not need it, there is very little general resistance to the toilet at this age. The child may use words or gestures, and many are beginning to go to the bathroom by themselves even though unable to care for themselves. Accidents are more common in the afternoon, when the span is shorter than the morning span of 1½ to 2 hours. Children are more apt to ask for the toilet at night after being put to bed than at naptime.

The majority are wet after their naps, even though they may have been previously dry. Dryness depends largely on how quickly the mother gets to the child after he has awakened.

Resistance to being picked up at 10 P.M. is strong with many, so that many are not picked up at this time. They are usually wet in the morning.

BATH AND DRESSING

Bath—18 months—As at 15 months, the bath is usually given after supper. There may be occasional short periods of resisting the bath, the cause of which is hard to determine. Perhaps the child has fallen in the tub or has felt unsure on the slippery tub bottom, or has been disturbed by the noise of water gurgling down the drain.

[A rubber mat placed on the bottom of the tub may help to give a feeling of security.

Children who are stimulated rather than relaxed by a bath just before going to bed should have their bath at an earlier hour.]

21 months—There is an interest in helping to wash out the tub, an expression of the child's urge to imitate domestic activities.

Dressing—18 months—The child at this age is becoming interested in the process of being dressed and is on the whole quite cooperative. He even tries to put on his shoes but he is better at undressing than at dressing. He takes off his mittens, hat, socks, can unzip zippers, and is beginning to have an interest in undressing for itself.

21 months—The child undresses completely down to and sometimes even including his shirt, if that is easily removed. He does this when alone, usually in his room or out in the back yard. It is a common sight to see a 21 month old child frisking about the back yard without any clothes on—only the chill and cold of winter may inhibit this removal of clothes.

SELF-ACTIVITY

18 months—The 18-monther is indeed a busybody. He is both secure on his feet and secure in his own interests. He is not yet enough aware of people to be over-

EIGHTEEN MONTHS OLD

demanding, and demands occur mainly when he gets into trouble with his own activities. He has usually graduated from the playpen, though if his motor drive and activity are low he may prefer his 15 month old station of being in his play pen in the front yard. If he refuses the pen, his refusal is strenuous and should be respected. He will settle down to a happy play time either alone in his room, on a closed in porch or in a closed in yard space which is not too big but which gives him space to run around. He may prefer to be in any of these places for most of the morning, although he may enjoy being shifted from indoors to outdoors.

The success of his play depends upon the presence of interesting playthings and the absence of hazardous equipment. Because he is such a furniture-mover and is beginning to be such a climber, it is wise to remove chests of drawers and small tables and chairs which he can move, while he is playing in his room. If a chest of drawers remains, the drawers should be locked to keep him from getting into them, or the dresser turned to face the wall. Windows and screens should be securely fastened.

Indoors he endlessly shifts from pull toys to doli to teddy to pots and pans to balls to fitting toy to blocks or a hammer toy to magazines (especially those with colored advertisements). He hugs the doll one moment, drops it and runs over to finger the light plug the next, runs over to sit down and look at the magazine, tears out a page when he is finished, gets up and goes to his hammer toy. He may become angry when things do not work the way he thinks they should, but he does not usually call the adult for help. Out of doors on the porch or in the yard he also enjoys his indoor toys, but most of all he enjoys play

with sand and can sit for long periods filling and dumping sand, especially outside of the sandbox.

Besides the morning play periods alone, the 18-monther will accept being put alone in his room with the gate closed for fifteen to thirty minutes while his supper is being prepared, provided that he has had a happy social afternoon. If he is not to be put to bed at the usual 6 o'clock hour, it is wise to build up an evening play period in his room if his parents have an early dinner hour. This is initiated best with a new toy and should not continue past the time when he starts to fuss.

[Toys which are too difficult to handle and which for this reason bring on crying should be removed from the child's room and reserved for social play periods. Books which the child can tear should be removed from his room, though he may be allowed discarded magazines for his tearing play.]

Light plugs in the child's room should be either disconnected or covered over, because of the danger of an electric shock resulting from the child's inserting sharp metal objects such as hairpins.]

21 months—The prolonged busyness of the 18-monther is now lessening because of the child's new awareness of people. His play periods alone are now more frequent but shorter. He likes to linger in the kitchen in the morning until 9:30 or 10:00 before he will go to his room or to his outdoor play space, and then he may stay only if he himself closes the door.

Indoors, a toy telephone, circles on a peg, or a small cardboard chest of drawers delight him. He enjoys acting out many of the household tasks he has seen performed, as dusting, opening drawers, or putting things on shelves. He still tears magazines, but his eyes may hit upon the wall paper

and he may have the kind of hands that become busy picking at it. There are apt to be more interruptions of the play period at this age. He is more likely to fall or to get stuck. He quiets with affection after a fall.

He may scream for assistance as well as from fright if he suddenly has a bowel movement in his pants. After his mother has come to him, the child may refuse to return to solitary play. However he will later remain happily in his room as his lunch or supper is being prepared if he is told that his mother is "fetching the num-num." He also may build up a longer evening play period, as long as one hour, during his parents' early dinner hour.

SOCIALITY

18 months—This is the age when the child is "into everything" as soon as he is given the run of the house, and he never stays in one place for long. He is, however, becoming interested in the activities of the household such as sweeping and dusting, and enjoys mimicking these. He is beginning to know where things are kept, likes to fetch things (father's slippers when he comes home), and especially enjoys putting things back. He can also go to places where things are kept and ask for them, if they are out of reach, by looking or pointing, making the sound of demand ("eh-eh"), or sometimes by naming.

His main time for social demand is not until after his nap. Then he wants to go out for a walk. He may even prefer to leave his carriage at home, though he may ride in it for a while and then want to push it. He likes to be on his feet and to go exploring. He darts into every by-way that he sees or up any steps. He also rushes into the street. He refuses to be touched or to

have his arm held, but generally tolerates a harness if it is used only when needed. The harness should be used with a loose rein except to break a fall, and the reins should be looped up whenever they are not needed. The 18-monther does not need to travel far from home since he so enjoys his weaving back and forth and his penetration into all by-ways.

When he plays indoors with an adult he can tolerate only a short time in the living room before he gets into things. He now enjoys dumping the wastepaper basket. He also enjoys turning the knob of the radio to get music to dance by. For a short period he may enjoy looking at picture books, turning pages, pointing to objects, and occasionally naming them.

But as soon as he fatigues, he is apt to grab objects and strenuously resists inhibitions. Then a sit-down temper tantrum may ensue, which can be terminated only by letting him have the desired object or by picking him up. Sometimes when he realizes he is taking something he shouldn't, he runs away and drops the object as he runs. After a very short time in the living room he plays happily with the adult in his own room, which is his favorite place.

After his evening play period of fifteen to twenty minutes he enjoys coming to the dining room, and sits happily if confined, looking at a book or chewing on some food. He especially enjoys sociability with his father before bed, with a little roughhousing.

21 months—At 21 months the child is not only more aware of people than formerly, but also knows what belongs to different people. He now understands, "This is mommy's," "This is daddy's," and "This is Bobby's" (his own). A sense of property rights is dawning in his mind. He likes his

own place on the bookshelf, his own drawer in his parents' desk, his own corner in his mother's room with some of his toys there. In fact, each room acquires new meaning to him if he has something of his own in it. Then he always knows what to do in each room as he enters, and when he has exhausted the possibilities of his own things it is time to leave that room, for it is then that he begins to get into other people's things. He cannot be trusted alone in any room except his own.

He is now more aware of household activities and wants to participate in them. A favorite room is the kitchen. He likes to fetch things out of drawers, use them, and put them back. He delights in putting the groceries away and really knows where they go. After play in the kitchen he will happily go to his room for his morning play period, or else out-of-doors. He usually demands company by 11 A.M. and wants to go on a late morning walk before lunch. But before he goes for his walk he will gladly help pick up his toys and put them away.

The walk is similar to that at 18 months except that it involves more awareness on the part of the child. Whereas at 18 months he went hither and yon impulsively, he now goes to the same places knowingly and with remembrance. His eyes are already picking out walls and it will not be long before he will want to walk on them. He responds less quickly to requests and is apt to do the opposite of what is asked of him,

such as going in the opposite direction. This is especially true when it is time to go home. However some incentive such as a constant repetition of "Go see Susie" (who may be the dog, cat, maid or a doll) causes the homeward path to be taken in one direction.

The child is now both more responsive to and more demanding of the adult. He now grasps the adult's hand and pulls him to show him things. He is now more conscious of his acts as they are related to the adult and to the adult's approval or disapproval. He is conscious of disapproval of his tearing off the wall paper, and very adroitly directs the adult's attention away from the marred place on the wall.

He also can control the adult by calling his name. Many, especially boys, do not call their mothers "ma-ma" before 21 months. They now also have words for their desires, and combine the giver and the gift as when they call, "Mommie wa-wa," or "Mommie toidy."

This is the age when this new acquisition (language) may be used repetitively, and when going to bed is beginning to be fraught with frequent calling back of the mother. This is especially evident if the child has been put to bed at the usual 6 P.M. hour when he actually does not go to sleep before 7 or 8 P.M. The adult must then realize that the child has outgrown his infantile ways and needs a more mature type of handling.

§3. CULTURAL AND CREATIVE ACTIVITIES

Books

1. Attends to pictures of familiar objects in books.
2. Listens to short rhymes with interesting sounds, especially when they are accompanied by action or pictures. Likes to have them sung.

NURSERY BEHAVIOR

3. Enjoys tactile books such as "Pat the Bunny" or "The Tactile Book."
4. May look at books upside down.
5. Needs supervision while looking at books as frequently tears them at this age. Cloth and heavy cardboard books are recommended.

MUSIC

1. Spontaneous humming or singing of syllables.
2. Wide range in tone, pitch and intensity of voice.
3. Very much aware of sounds such as bells, whistles, clocks.
4. Rhythmic response to music with whole body activity.

PAINTING

1. Whole arm movements.
2. Very few strokes on a page, often in the form of an arc.
3. Shifting of brush from one hand to the other.
4. Satisfied with only one color.

BLOCKS

1. Carries blocks around the room, pounds them together, or dumps in a mass.
2. Only building may be a tower of three or four.

POSSESSIONS

1. May have a special toy, blanket or other object to which he is attached.
Unable to sleep without it.
2. Definite relationship of possessions to their owners—takes hat or pocketbook to its correct owner.

EXCURSIONS

1. Enjoys short walks; runs ahead of adults; interested in all by-ways.

§ 4. NURSERY BEHAVIOR

IF EIGHTEEN MONTHS attends a nursery, it is on a very special basis and for a short session. He needs constant watching. The vigilance of one adult cannot be spread over more than two or three children of this runabout age. The conditions on which he is permitted to attend a

nursery will be stated elsewhere. The following sketch of his hour in the nursery does not attempt to describe individual differences; nor does it describe a model child; it simply outlines the kind of behavior which is illustrative and typical of this interesting stage of immaturity.

EIGHTEEN MONTH OLD arrives at the nursery at about 9:30 in company with his mother. After the first few visits he shows an interest in his new surroundings. He is likely to break into a smile on arrival. The mother in her zeal may try to have him say "how-do-you-do," but he in his wisdom remains mute or simply jargons to his guidance teacher. He tends to loiter as he approaches, perhaps touching the walls of the vestibule.

He takes off his cap; his mother takes off his wraps. He does not hang them up, but strains to get away even before the wraps have been completely removed. Without leave-taking ceremonies, he darts into the room, and makes for the toy shelf, giving almost no regard for his teacher. He touches one toy after another, the blocks, the rings, the telephone and then climbs up the stairs. He finds a doll in the crib, picks it up with dispatch, hands it to the teacher, exclaiming "oh!"; then hands her a toy dog, slides down to the main floor; runs across the room; spies the nested blocks, runs over to them laughing. He sits down a moment, takes a few of the blocks apart and then toddles over to another focus of interest, the peg and hammer toy. He carries a block with him, but drops it heedlessly on the way to give heed instead to the hammer and pegs. After a brief period of pounding he makes for a favorite toy, a collection of rings on a pole. He picks up several and deposits them in the teacher's lap, less interested in the social than the fetch and carry aspects of the situation. He makes very few overtures to her; he does not wait for her direction but he likes to have her around, misses her if she is absent.

He is not as heedless of persons as appears on the surface. Often he stands and watches the other children and responds with bits of mimicry. The teacher removes the turtle from the aquarium and places it on the floor. The group of children gather around to watch; they assume the squatting position characteristic of this age. There is a moment of con-

centrated group attention; then the group disperses, each child renewing his independent succession of activities.

There are no idle moments. When EIGHTEEN MONTH OLD is not exploiting a toy he is usually transporting it. His postural sets and postural control are put to ceaseless, varying tests,—he goes up and down the three-flight staircase, front-wise, back-wise and with other permutations; he slides, he crawls through a tunnel, he moves chairs and table about; he pulls a wagon, pushes a doll carriage, but without clear destination or purpose, quickly abandoning one type of activity for another.

After perhaps twenty minutes, the sight of the table may remind EIGHTEEN MONTH OLD of the fruit juice which he enjoyed the week before. He brings a chair to the table, seats himself by backing into the chair and by demeanor and gesture rather than words, declares his readiness for refreshment. He cannot pour his juice, but he manipulates his cup, drinks noisily and restores the cup to the table, with at last a verbalized "more." In a semi-automatic manner he stretches out his hand for crackers.

Luncheon over he inspects a picture book with the help of his teacher, both cooperating in the turning of the pages. He listens to music for a few minutes, responding with a bouncing rhythm.

He is dressed for outdoors. This may take five minutes for he cannot offer much assistance in the process. He makes ready adjustments to the change of scene which takes him to the slide, the jungle gym, the sandbox, the dump truck, and the water-paint. He takes a brief journey on the kiddy-car. His favorite sedentary occupation is a repetitious filling and dumping of sand. He takes an inarticulate pleasure sitting back to back with a companion, while both dump and fill and fill and dump; each apparently self-engrossed.

If instead of continuing to play with the sand, he should revert to thumb-sucking or inactivity, we should regard it as a symptom that he has overstayed his hour. In the interests of his psychological hygiene, the mother's return is punctual and her return is welcomed by the child.

§5. NURSERY TECHNIQUES

PHYSICAL ENVIRONMENT

SIMPLIFY the physical environment to prevent over-stimulation. Provide gross motor equipment, such as stairs with railing, and slides, to suit the child's gross motor drives. Manipulative materials are also necessary.

The simplicity and freedom of the outdoors are suited to the psychology of the 18 month old child. Outdoor activity reduces tensions and resistance. He enjoys the outdoors and this puts him at his best.

A sandbox is a necessity at this age, providing as it does a focal center capable of holding interest without the restrictions of bounds, as well as an opportunity for filling and dumping play.

ADJUSTMENT

Adjustment should be effected at this age through *things*. It often consists of gradual luring of the child away from the mother by rolling rings which he follows, by moving manipulative toys farther and farther away from the mother, or by centering his interest on some part of the room or on toys at a distance from and if possible out of sight of the mother. This gives her a chance to slip out. This is not an age for formal goodbyes. "Out of sight out of mind" applies here.

ROUTINES

Do not attempt to set up elaborate routines (as toilet, washing hands, resting) too soon after entrance. These activities are not only associated with home and mother but are often not yet well established and the child may resist them in school for several weeks or longer. His adjustment to school may be jeopardized if these routines are pushed. Diapers and rubber pants to keep the child dry, a short stay at school to avoid the necessity for rest, are desirable.

The one routine which is accepted and heartily enjoyed is midmorning lunch of juice and crackers.

He also enjoys some participation in undressing, such as taking off his hat and mittens, and putting his clothes in his cubby; but the rest of undressing and dressing has to be done by the teacher.

The child at this age has a strong desire to "put things back" and enjoys clearing up the room before midmorning lunch.

NURSERY TECHNIQUES

TRANSITIONS

Avoid resistance to sudden changes by utilizing methods of gradual transition. (Verbal transitions are usually futile at this age.) Allow the child to take a favorite toy with him. Use the toy as a lure to get him from one room to another. Utilize his responsiveness to gross motor humor by picking him up as a bag of rags. He may accept this, while resisting simpler touching approaches such as having his hand held. He likes chasing someone and being chased. Do not expect to control him through hypnotism or solemn discipline.

TEACHER

For his safety each child needs the close and constant physical supervision of an adult teacher. Children of this age are quick and adventurous and frequently tumble. Therefore groups should be kept small.

Direct the child through objects and physical orientations and gestures. Use language sparingly.

When contacting the child it is important for the teacher to be on his physical level by squatting or sitting on a low chair or on the floor.

The teacher's role is more passive at this age than at the immediately following ages. Her chief role is protecting and supplementing.

Once the initial adjustment is made, this is one of the easiest ages to handle because the child goes on his own steam and is not likely to get into conflicts with his contemporaries.

VERBAL

Use language sparingly. Simple well chosen words such as "all gone," "thank you," "bye-bye" are most effective. The child responds better to one word or a short phrase than to complicated explanations. For instance, "Hat?", or "Outdoors?".

Use the child's name in addressing him rather than the pronoun, as "Bobby wash hands."

Situations can be terminated by "thank you," or "bye-bye."

It is important for the teacher to employ a rising, expectant inflection when she speaks to the 18 month old child.

Gestures are often needed to reinforce language.

The 18 month old has an immediate time concept and only understands "now" or association with routines, such as "after juice."

EIGHTEEN MONTHS OLD

HUMOR

Children may respond to gross motor humor as hiding and peekaboo, and being lifted in bag of rags fashion. Such humor can be used in effecting transitions.

OTHER CHILDREN

The 18 month old child tends to treat another child as an object rather than as a person. He resorts to experimental poking, pulling, pinching, pushing, and sometimes hitting. The teacher needs to be on guard to direct this experimentation into harmless channels. She should not attempt to force socialized cooperativeness at this age.

GROUP ACTIVITY

These children are not ready for group play. Most of their time is spent in solitary activities. Group activities are largely confined to gathering for midmorning lunch, or for short glimpses of nature specimens or new toys.

TWO YEARS OLD

§1. BEHAVIOR PROFILE

AT TWO YEARS the child cuts his last milk teeth. He is no longer an infant though compared with a 3 year old child he is still very immature. There is danger of overestimating his capacities, simply because he is sturdy on his feet and is beginning to put words together. He is still an infant-child. He has so much behavior to coordinate, to organize in this third year that we must stress his limitations as well as his prodigious capacity for growth.

He does not yet walk erect. There remains a little of the angularity of the ancient man in his posture. Knees and elbows are slightly bent, shoulders are hunched. He holds his arms out and backward. His abdomen, however, does not protrude as much as at eighteen months. When he picks up something from the floor, he half bends at the waist as well as at the knees; whereas at 18 months he squatted. Stooping is a more ad-

vanced behavior pattern than squatting. But the 2 year old still leans forward as he runs. Should he fall he would bruise his forehead; at 2½ years he will hit his nose; at 3 years, his teeth. These are consequences of his physical make-up, just as his behavior traits are consequences of the make-up of his action system.

To get up from a sitting position on the floor, he leans forward, pushes up buttocks first, and head second, instead of raising an erect trunk as he will later. He goes up and down stairs mark-time fashion, without alternating his feet. He can kick a ball, whereas EIGHTEEN MONTHS merely walked into a ball; but he cannot stand on one foot as he will in another year. There is not much spring in his knees. The knee joints become flaccid or rubbery when one tries to slip on his leggings. He is rather hard to dress even though he is cooperative.

He is still geared to gross motor activity, and likes to run and romp, lug, push and pull, but with better coordination than at 18 months. His fine motor control also has advanced. He manipulates more freely with one hand, and alternates from one hand to the other. He rotates his forearm, which enables him to turn a doorknob. He can crudely imitate a circular stroke. This increased manipulatory skill expresses itself in his marked interest in fitting one thing into another. "It fits" is a favorite and sometimes triumphant sentence. He also likes to take things apart and fit them together again.

The muscles of eyes and face are more adept. He moves his eyes more freely and is sensitive to marginal fields, whereas at 18 months he ran headlong as though he had blinders on. He stops and engages in long periods of looking. The muscles of the jaw are coming under full voluntary control. Chewing is no longer as effortful as it was at 18 months, and mastication is becoming more rotary.

The whole linguistic apparatus, mouth, lips, tongue, larynx and thorax, is undergoing rapid organization. Jargon is dropping out, sentences are coming in. Soliloquy is taking the place of the babbling of the 6 month old child, as though on an advanced level the 2 year old is under a similar compulsion to exercise his vocal abilities, to repeat words,

to name things, to suit words to action and action to words. Vocabularies vary enormously in size from a half dozen to a thousand words, but the third year is ordinarily the year when words burgeon.

The third year is also the year when the sphincter muscles of bladder and bowel are coming under voluntary control. Culture seems to conspire to increase the burden of development. For this reason home and nursery must be on their guard not to expect too much all at once in the correlation of postural control, fine coordination, speech, sphincter control, obedience, courtesy and neatness.

The action system of the 2 year old is not yet sufficiently advanced to effect delicate and long sustained interpersonal relations. He still prefers solitary play to parallel play and seldom plays cooperatively. He is in the pre-cooperative stage; watching what others are doing rather than participating. He cannot share; he cannot as a rule let someone else play with what is his own. He must learn "It's mine" first. He does so by holding on and by hoarding. This is not a vice. How can he possibly acquire pride of ownership any other way? It is the method of development. Keeping and sharing are not separate virtues, they spring from the same developmental root. The hitting, patting, poking, biting, hairpulling and tug of war over materials so characteristic of Two need to be handled with understanding and sensible techniques on the part of parent and guidance teacher. The infant-child is still too young to be reached by words alone; he must organize his experience through touching, handling, holding, clasping and even a little hoarding and running away.

So to sum him up, what are his dominating interests? He loves to romp, flee and pursue. He likes to fill and empty, to put in and to pull out, to tear apart and to fit together, to taste (even clay and wood), to touch and rub. He prefers action toys such as trains, cars, telephones. He is intrigued by water and washing. Although he is not yet an humanitarian, he likes to watch the human scene. He imitates the domesticities of feminine laundry work and doll play. He has a genuine interest in the mother-baby relationship.

§2. BEHAVIOR DAY

THE TWO YEAR OLD child wakes somewhat slowly at, say 7 o'clock in the morning. He is happy to wake but not interested in getting out of his crib at once. He wakes wet but tolerates this condition and plays contentedly for about half an hour. He has a ready greeting for his mother, who toilets him and puts him in a bathrobe for an interim. He likes to go to the bathroom during this interim to watch his father shave. He is also content when he is returned to his room where he munches a cracker and plays behind the closed gate. At breakfast he accepts considerable help from his mother but contributes in small dabs of self-help. (He will take over more completely at the noon meal.)

After breakfast he is toileted and is likely to have a bowel movement at this time. He is dressed and again he offers some self-help. He plays in the kitchen for a while and then, at about 9:30, if it is not a nursery-school day, he returns to his room and remains behind the closed gate without protest. If he should catch sight of his mother he may clamor for release. Otherwise he plays by himself for perhaps an hour. At 10:30 he is toileted and, weather permitting, is taken out of doors. He makes no resistance to toileting because he takes it to mean a transition to new play experiences in his sand box.

In his small enclosed play-yard he engages in gross postural play activity, pulling toys, trundling his baby carriage, and climbing on boxes, and near noon he has acquired a vigorous appetite for luncheon. This is the big meal of the day. He helps in its preparation. He also insists on feeding himself at this meal. He may even ask his mother to leave the room as he does so, calling her back for a next course.

After luncheon he is toileted and put to bed for a relaxation period which usually terminates in a nap, though sleep may be delayed until about 2:30. The nap may last an hour. He wakes slowly. He usually wakes dry and responds to toileting. He takes some interest in dressing. He is beginning to show a well-defined liking for certain garments. He likes to

listen to his mother's conversation and to make a few contributions of his own.

After juice and crackers, he is ready for outdoors. He prefers a stroller to a carriage. He likes to walk, does not object to being held by the hand. He likes to walk on walls. He is not averse to an auto ride, and particularly enjoys the traffic, assisting the stop-and-go lights with his own commentary announcements.

He likes to watch the preparations for supper. He may even help a bit. He feeds himself in part during the evening meal.

He is toileted again and may have a second bowel movement.

By 6 o'clock he is ready for a period of solitary play in his room. He likes to climb in and out of his crib when the arrangements so permit. He also takes off his shoes as though by way of anticipation of going to bed. Frequently he has a brief session of play with his father. He is somewhat demanding about this bit of "life with father" for he insists that father should come directly to his playroom, without delaying to read the newspaper!

The daily bath comes after this play period. Here too the baby likes to offer some assistance and helps to wash himself with the washcloth.

He is off for bed at half past seven. He likes to have a book and some soft animal toy. After about a quarter-hour of play he may call his mother, requesting the toilet or a drink. He resumes play, and, after another interval, he is quite likely to call back again. By about 8 o'clock he is ready to say "goodnight," and this usually announces a release into sleep.

SLEEP

Night

The time of falling asleep depends to some extent on when the child is put to bed, but his falling asleep is usually delayed till 8 or 9 P.M. The nap tends to displace night sleep, and if he has no nap he falls asleep earlier. His going to sleep patterns are similar to those at 21 months, there

being many demands and requests. Children in whom these demands began at 21 months are often decreasing their demands by 24 months. Those who do not begin them till 24 or 30 months continue these patterns often until 36 or 42 months. By 24 months, demands before going to sleep include a request for two or three stuffed animals, a book or two, and a pillow. The child still calls his parent back with various

TWO YEARS OLD

requests, though these may be decreasing. Going to sleep is not an easy thing for the 2 year old and tensional overflows may occur in various avenues—play, gross motor activity like bouncing, calling for the mother or demanding the toilet. The child may actually need the toilet three or four times and even if he does not urinate he very likely has sensations that make him ask. Having the door slightly ajar or a light on in the hall seems for some children to make the mother more accessible and relieves their anxiety.

If the child can handle going to sleep by himself he sings, plays with his toys, takes the case off the pillow, bounces, and may even finally crawl back under the covers by himself. When he is once asleep he often resists being picked up for toileting, and this waking may actually disturb his sleep pattern. Some, however, awake by themselves, especially girls, and demand the toilet as often as three to five times a night. They not only demand the toilet, but may also demand a drink of water or a cracker.

When the child awakes, between 6:30 and 7:30 A.M., he usually plays happily in his crib with his toys. If he calls, he is quickly satisfied with being changed and given a cracker and a few toys. He is then happily occupied until it is time to get up, when he especially likes to join his mother or father in the bathroom.

[This is the age when the child begins to hold on to the mother as he is being put to bed. This does not occur as much with the father and may occur even less with a maid. Thus bedtime may be smoother if someone other than the mother puts the child to bed.

Some children wake at the slightest disturbance during the night. In these cases it is best to make every possible prepara-

tion for the child's safety and comfort before he is left, and then not go into his room again.]

Nap

Going to sleep patterns are similar at nap time to those at night time, with the exception that demands for the adult, at nap time, are put off till it is time to get up. Some give up sleeping at nap time for a few weeks or a few months, and others once or twice a week, but they will play happily in their cribs or rooms for an hour or more. If they do finally get to sleep, it is often induced by the adult's putting them under the covers, and they usually sleep well for two or three hours. Some do better if allowed to waken by themselves but too long a nap does displace night sleep and some children need to be wakened. When they awake by themselves they often awaken slowly and do not wish to be rushed through routines.

EATING

Appetite—Fair to moderately good. Breakfast is now relatively small. The noon meal is usually the best, but with some the one good meal is supper.

Refusals and Preferences—This is the age when the child is spoken of as "finicky" or "fussy." Now he is able to name many foods and has more definite ideas about what he likes. "I want," or "Billy wants" is a common expression at this age. His affection is not only shown toward his mother but also toward the foods that he eats. His sense of form makes him prefer whole things—whole beans, whole pieces of potato—unless he demands the extreme opposite, i.e., the continuation of purged foods. He does not like foods mixed up, such as gravy on his potato or milk on his

cereal, unless, of course, he does the mixing himself. His preferences may be related to taste, form, consistency or even color, red and yellow foods often catching his fancy. He is apt to repeat his demand for one food, but finally he drops that food completely and goes off on a different food jag.

[It is best to allow the 2 year old to have his food jags. Introduce new foods under new or pleasant situations. A great variety of foods is not needed by the 2 year old. If he holds food in his mouth, this may be considered a sign of satiety.]

Spoon Feeding—The child now shows less experimental interest in the spoon and dish as play objects. The spoon is grasped more between thumb and index (more common with girls), and pronately. Filling of the spoon may be accomplished by pushing the point into the food without utilizing the free hand to push on the food. The point of the filled spoon is inserted into the middle of the mouth. There is still considerable spilling, and those who are disturbed by spilling may refuse to feed themselves, but accept food readily when they are fed.

Cup Feeding—The child may now hold his cup or glass in one hand, with the free hand poised, ready to help if needed. He is able to lift, drink from, and set down the glass skillfully.

Self Help—Some 2 year olds are able to feed themselves entirely and will accept no help. They seem to know that they do better alone, and dismiss the parent with, "Mommy way!" If the mother remains in the room she may have to be careful not even to look at the child.

There are some, however, who eat better when partially fed. They may eat their main dish better if they are given a spoonful of dessert now and then. With still

others who are the really poor eaters, the further distraction of stories, told or read, may be needed, especially when they are eating foods that they do not like.

The two extreme groups, the messy and the spotless eaters, are rather clearly defined at 2 years. The spotless are more apt to demand to be fed, to hold onto rituals, even to demand a special mat under their dessert dish if this has once been provided, and also to hold onto a repetition of certain foods.

ELIMINATION

Bowel—Accidents are rarer, though they come in periods. The two daily bowel movements usually occur after meals. Those who have a nap relationship are slower in being trained. The child now differentiates bowel and bladder functions verbally. He may ask with such phrases as the following: "Make movement," "I have to go grunts," "Make a mess." Although he needs to be helped to go to the toilet, he wants to be left alone and often speaks imperiously to his parent with, "Get out," "Go downstairs," or "Go away." But when he is finished he calls the parent back again to help him. Some children will not have a bowel movement if they are put on the toilet, but will only go if they put themselves on.

[The 2 year old who will not have his bowel movement when placed on the toilet may do better if allowed to go by himself. This is often best accomplished by allowing him to run around in or near the bathroom without his pants on at the time when the bowel movement ordinarily occurs. Toilet facilities should, of course, be of a size and kind that he can use by himself.]

Bladder—There are fewer daytime accidents, though they may still occur in periods. The child's span is fairly long

now (1½ to 2 hours) and he often asks for the toilet. "I have to go potty (toidy)," or "Do wee-wee" are common expressions. He does not usually resist routine times before and after sleep, and mid-morning and afternoon except when he does not need to urinate. With most children there is an increased frequency period as short as twenty minutes between 5 and 8 P.M. Some are trying to go by themselves and may successfully remove their pants but cannot reach the bathroom in time.

They are now beginning to be proud of their toilet achievements and are apt to say, "Good boy" or "Good girl" when they have finished. They are also more concerned about their failures. They may suddenly cry as they urinate and find it difficult to move with wet pants on. Or they do something about it, taking off their wet pants and putting them in the hamper.

They are now more frequently dry than wet after their naps. Some may have a week's period when they wet daily and others may revert to wetting once or twice a week.

There is a good bit of variation in night wetting, with girls achieving dryness considerably ahead of boys. A fair majority of all children at this age are dry at 10 P.M. They usually wake when picked up and may or may not mind being picked up. Even when they do not object they may have difficulty in getting back to sleep. If they are not picked up they may in any case awake during the night to be taken to the bathroom. A few are dry in the morning but the majority are wet even though they have been picked up at night.

[If children are picked up at 10 P.M. they need not be awakened, though they usually do awake of their own accord at this age. If the child still wets at night it is

still desirable to continue diapers and rubber pants.]

BATH AND DRESSING

Bath—The child is now becoming more interested in helping to wash himself, and may prefer the washcloth to the bath toys. He is especially interested in washing and drying his hands, though he does neither very well.

[If the child refuses his bath, accept his refusal. He may, however, enjoy the change of having a sponge bath or of being washed on the hamper with his feet in a basin.]

Dressing—The 2 year old can take off his shoes as well as his stockings and pants. He may try to put on some of his clothes by himself but is not very successful. He almost invariably puts both feet into one pant leg and puts his hat on backwards. When being dressed he is not only cooperative but definitely helpful. He finds large armholes and thrusts his arms into them, and lifts his feet to put on his pants. Some children still like to undress over and over again as a game and enjoy running about without their clothes on. However, at 2 years, the recurrence of this undressing pattern comes only for short periods, as is true with so much of their other behavior.

SELF-ACTIVITY

If the snags of 21 months were not properly handled or ironed out, the child may be unable to adjust to a morning play period alone. Fortunately it is most frequently the child who is too stimulated by being with people who often does best alone, and the child who plays nicely beside the adult without getting in the adult's way who refuses to play alone.

The 2 year old may, on the days when

he does not attend nursery school, go happily to his room after a spell in the kitchen, if the doorway is guarded by a gate. But he may allow his door to be closed in anticipation of having something such as a letter or card slipped in under it.

He is now quieter at his play and has more continuity in doing things. He especially likes things that move and turn, such as little cars and wheels. In the kitchen the meat grinder and egg beater delight him. Screw toys and even a screw driver, which he cannot handle alone, are also enjoyed. He now lines up his blocks and enjoys the blocks that stick together and fit into each other. The 2 year old often chooses little things like pebbles, pieces of string, marbles, beads, little bottles, and little books. Christmas cards are also cherished. Within the domestic line he now both feeds and toilets his doll and teddy and may even put them to bed, or take them for a ride in a doll carriage.

It takes the 30 month old child to conduct a proper tea party, but the 2 year old enjoys the fitting together and matching of cup and saucer and the pouring of water. Out of doors, sand still holds his interest, with digging becoming more efficient. The addition of water is more than desired by the child, but is not the easiest thing for him to handle when he is alone, and always seems to lead to a demand for more water. Pushing a wagon or a baby carriage, along with other gross motor activities of running and climbing, are favorite out of door occupations.

SOCIALITY

The 2 year old child is now becoming quite an acceptable member of the household. With his further understanding of property rights he gets into fewer things. However he has now reached the stage of

possessing as many things as he can, often with only the slightest reason for claim, and he insists upon his rights with "It's mine." The strength of his home demands is often in rather marked contrast to the meek compliance of his behavior away from home.

He enjoys helping in the house, running errands, helping make beds or clean the bathroom, and placing the table silver. He enjoys bringing ash trays or passing things to people. He seems so mature in so much that he does that he is sometimes not watched closely enough. When left to his own devices he can completely wreck a room, especially his mother's bedroom, in a very short time, by emptying bureau drawers, pulling scarfs off bureaus, and getting into powders or creams.

His walks are now more sedate. He likes to hold the adult's hand. He may stop to pick up sticks or pebbles, but he does not linger long. He delights in walking on walls or curbstones with his hand held. This is one way in which he can be given the sense of the boundary of the street. If he lingers behind his mother he usually comes running when she starts off and says goodbye to him. He will now accept a ride in his stroller, and if he still uses a carriage he enjoys hiding back under the hood especially as he passes strangers.

His afternoon play period in the house is happiest with books and music. The nursery rhymes strike a responsive note in the 2 year old and any kind of tactile book demands repeated feelings. Dancing to music now includes running, turning in circles, and the beginnings of bouncing up and down.

The father is still a great favorite at this age, though the child may want his mother if he is in any trouble or at night when he is tired, and especially during the night.

He may show considerable dependence on his mother and is apt to demand all of her attention if there are others present. This is the age when affection is shown for parents or for those caring for the child, especially in the evening before bed.

The 2 year old with his increasing awareness of people goes through a shy period with strangers, especially adults. Indoors he may put his fingers to his mouth, hide in the folds of the curtains or against his mother's skirts. Out of doors he may act the same, or may walk a large circle around a passerby, or hold the adult's hand and keep very close to her. But when he once becomes acquainted with a stranger, and especially if the stranger is of a preferred

sex, he generously brings all of his toys and places them in the stranger's lap.

He is now enlarging his vocabulary from "baby" to "man," "lady," and even "boy" and "girl." He is delighted to be with other children and plays especially well with older children. He has passed through his earlier aggressive stage and is able to play parallel with another child. He almost always needs close supervision when playing with another child, especially after the first twenty minutes of play.

It is best for either the mother or the father to handle the child alone. This prevents conflicts. Many children find it difficult to be with both parents together until they are much older.

§3. CULTURAL AND CREATIVE ACTIVITIES

Books

1. Enjoyment of simple pictures with few details and clear color.
2. Likes to talk about pictures, having adult turn back the child's "Whassat?" with "What is it?" or an explanation. Likes to have the adult ask, "Where is the kitty?" etc.
3. Enjoys having stories simplified by interpreting them to him using his vocabulary, people and experiences he knows and especially his own name.
4. Interested in sound and repetition, as in "Ask Mr. Bear."
5. Likes listening to nursery rhymes and repeating them with the adult.

Music

1. Sings phrases of songs, generally not on pitch.
2. Enjoyment of rhythmical equipment such as rocking boat, swing and rocking chair. These often stimulate spontaneous singing.
3. Rhythmical responses as bending knees in bouncing motion, swaying, swinging arms, nodding head, and tapping feet are favorites.
4. Likes holding something as block, bells or another's hand while walking to music.
5. Interested in watching victrola operate while listening to records.

CULTURAL AND CREATIVE ACTIVITIES

PAINTING

1. More wrist action than at 18 months.
2. Less shift in handedness, though often paints with a brush in each hand.
3. "Scrubbing" paper with little regard for color. Paints several colors over each other vigorously, with muddy effect.
4. More variety of strokes when only one color is presented.
5. Process, not end result, important to the child.
6. Easily distracted and does not always watch hand movements.
7. Social enjoyment of painting on same paper with another child.

FINGER PAINTING AND CLAY

1. Initial objection to feeling of paint and getting hands dirty, but enjoys it after a few trials.
2. Manipulates clay—pounding, squeezing and pulling off small pieces; often handing to adult.
3. Often experiments with the taste of clay.

SAND, STONES, WATER

1. Fills pails and dishes with sand and stones, dumping and throwing.
2. High interest in water play—extensive hand washing, washing clothes, filling and emptying dishes.

BLOCKS

1. Used manipulatively filling wagons, dumping and rolling.
2. Some building of towers and lines, often combining various sizes of blocks in random order.
3. Preference for colored blocks.

POSSESSIONS

1. Pride in clothes—especially shoes, socks and handkerchief.
2. Strong feeling of ownership in toys. "It's mine" is a constant refrain.
3. Difficulty in sharing toys; hoards them.
4. May bring small token such as marble, orange-section, etc., to school and hold onto it all morning, objecting to anyone's taking it.
5. Enjoys naming possessions of others, and telling to whom they belong.
6. Much interest in money but almost no understanding of its use. Likes to use it manipulatively, carrying it around and handling it.

TWO YEARS OLD

HOLIDAYS AND FESTIVALS

1. Birthday—Enjoys a party with just family or perhaps one other child. The best time for this is the child's regular mealtime. The food is the party for the 2 year old.
2. Christmas—The tree is important. He enjoys Christmas cards and plays with them long after Christmas.
3. Valentine's Day—Enjoys receiving Valentine cards and may carry them around for days.
4. Easter—Interest in the Easter Bunny.
5. Hallowe'en—Not much interest in this holiday.
6. Thanksgiving—Has little meaning except for naming the turkey. May not enjoy the day because shy with guests.
7. Religion—Some are ready for Sunday School if it is run on nursery school principles. Enjoy repeating the last phrases of prayers.

EXCURSIONS

1. Out-for-a-walk he is interested in touching things he sees along the way. Picks up sticks and stones, touches animals. Likes to walk on curbs or walls. Dawdles and concentrates interest within a small area.
2. No thought of destination.

§4. NURSERY BEHAVIOR

EIGHTEEN MONTHS darts and dashes. TWO YEARS is not such a quick shifter. Indeed he is something of a dawdler. He is more wary and a little more conservative. When he comes to the Guidance Nursery in the morning he likes to linger over the preliminaries. They are not mere preliminaries for him; they are genuine experiences. He is not stalling, nor is he indolent; he is taking time to absorb and assimilate each experience. Perhaps now it would be *superficiality* to flit too rapidly from one thing to another.

While his outdoor garments are being removed he likes to talk to his

teacher about his shoes, socks or handkerchief. He recognizes his teacher and accepts her in this familiar setting (if she has not made too radical a change in her attire); but even so his mother may have to help him make the re-transition, by withdrawing gradually and slipping away opportunely. He is fond of the familiar and an altogether strange new teacher might baffle or disturb him. (He may even be perplexed by a familiar assistant teacher. He prefers a relationship with one adult at a time both at home and at school.)

On leaving the cloak room for the nursery, he makes at once for some favorite toy such as the spindled blocks, and begins to play by himself. This self-chosen play engrosses him almost completely for a while and then he gradually shows awareness of the other children and their activities. He begins to watch at first with curiosity and then with deepening insight. Solitary play gives way to parallel play.

He watches a girl, whom he may call by name, ironing a coverlet. She is surprisingly deft at this particular bit of domesticity. She smooths out the wrinkles by hand, shakes the cloth, applies the iron, smooths and shakes again. He watches actively (he can scarcely watch any other way); the sight of the ironing induces corresponding movements in his own action system; he is impelled to seize another iron (fortunately there are two), and he duplicates with somewhat less deftness, but without embarrassment the whole series of manoeuvres. Before the morning is done there will be many brief episodes of mimicry, imitation, and dramatic rendering, particularly of the best known household events.

Doll play is therefore far advanced beyond the 18 month level. The TWO YEAR OLD wraps a blanket around the doll, clasps it to his bosom. places it adaptively in bed, and tucks it in at least crudely. This is all done in a quick touch and go manner. Attention span is still short; but he makes up for the shortness by doing the same thing over again at intervals and with variations.

So he, or she, goes blithely from one activity to another without much rhyme or reason in the transitions. For example, when **she** is through

with her ironing, what will the aforementioned 2 year old girl do in the next three minutes at her disposal:

9:22 She walks over to the aquarium table; pats the table; points at the salamander.

9:23 Moves to a chair, straddles the chair, pokes more bravely at the salamander, saying, "Go away."

9:24 Mounts the rocking boat, rocks heartily, smiles at her teacher. Gets up, strikes an akimbo pose, watches a playmate; picks up a wooden hammer; offers it to him, saying, "Seel!"

9:25 Goes back to her ironing, which her playmate again imitates.

But it is a brief session of imitation. He wanders off on his own initiative. It is really a wandering of attention. We follow his journeys and find that in the next fifteen minutes he makes at least seven trips to the tower gym and return; sometimes he goes empty handed; more often he transports and deposits a toy.

At first blush this activity looks like 18 months run-about behavior, but on close examination it proves to be much more complex in its adaptive moments, and less mercurial. At 18 months he pulled a cart a short distance and then dropped the handle and went on to other things. At two years he pulls the cart and "parks" it in the corner before he shifts to the next activity. He still acts in snatches, but the snatches are more organized and on each repetition with variations, the process of organization continues. This is the present logic of his development. And the nursery program is designed to favor this mode of development.

After toilet routine, it is time for mid-morning juice. He climbs or backs into a chair, and is none too skillful in placing either himself or the chair. He pats the table, saying "caca (cracker) too," as the juice is poured. He grasps the cup with both hands, drinks with spilling, puts down the cup, watches the other children intently. He wipes his face with a napkin, with a crude back and forth swab, runs over to the phonograph, listens to the music for a brief space, and returns to his ironing.

Next, he goes to a small table for clay play. He allows his teacher to sli

NURSERY TECHNIQUES

an apron over his head. He pulls off pieces of clay, saying, "roll, roll." He pats little daubs of clay onto the board and then returns them to the mass of clay. Occasionally he varies his play by poking and slapping at the mass. He picks off a large lump and pushing it along the table top pretends that it is a train. (At this age children often pretend that a block is a cooky or something else which they desire and lack.)

Clay play over, he follows the teacher into the washroom for hand-washing. Then, on suggestion, he runs to bring his outdoor clothes from his cubby. He puts on his hat himself and thrusts his hands into mittens. Leggings and coat are put on by the teacher.

He runs to the doorway, pausing on the threshold, and then walks slowly out into the yard. He goes to the sand-box and sits in it, playing quietly in the sand while he watches some of his more active playmates racing about the yard. For the first ten minutes outdoor play is usually solitary, but gradually the play builds up till parallel play predominates, whether children are chasing each other about the yard, racing in and out of the playhouse, or playing more quietly side by side in the sand-box. The group often play better out of doors than they do inside. Although there is little actual conversation, they laugh together, and there are numerous physical contacts as well as parallel play. There are eddies and bursts of contagious humor.

Outdoor play holds up nicely whether the child is racing around or playing in the sand, for about half an hour. If fatigue sets in, bumps and tears are inevitable for one or two in the group. Nearly all are glad to see their mothers, who take them home directly from the playground. Going indoors again makes the transitions more complicated and difficult even for the 2 year old.

§5. NURSERY TECHNIQUES

PHYSICAL ENVIRONMENT

18 months' equipment can all be used at this age. In addition there should be a doll corner and climbing apparatus.

TWO YEARS OLD

ADJUSTMENT

This is perhaps the most difficult age for adjustment. The child is increasingly aware of and affectionate toward his mother and therefore finds it hard to leave her. He is also shy of new people and new places. If there is difficulty, it is often best to have some relative or neighbor bring him to school instead of his mother. Adjustment is effected through *people* at this age. Therefore one special teacher greets him, stays near him, and helps him to initiate activity.

The initial adjustment may be better outdoors, and it may be necessary for the teacher to carry him out and attempt to interest him in sand, filling and dumping, rolling toys, etc.

There may be initial crying at this age, which usually stops quickly as soon as interest is caught and held.

ROUTINES

The child accepts elaborate routines at this age, though he may still resist toileting. He has a tendency to prolong hand washing, and may need the teacher's help in stopping. He may respond to, "Goodbye water," combined with having the plug removed, and being led to his towel.

Mid-morning lunch is still the high point of the morning. He can wait for the group to collect and enjoys having everyone there. He should not be expected to conform to one cup of juice and one cracker, though often he will respond to "One (cracker) for each hand." He should be allowed a second helping, and is usually satisfied when he sees that the supply is "all gone." Some may demand and need more than others, and some may even refuse crackers.

The child is not yet ready to relax for a mid-morning rest, but music and books provide a period of relaxation.

Two is interested in dressing and undressing though he does not help himself beyond removing his hat and mittens, and zipping and unzipping zippers, which are a new interest.

TRANSITIONS

Two is prone to dawdle, but can be shifted by such devices as the following:

- a. By leading him away, if he is not resistant.
- b. By talk of next thing: "Go find the soap;" "Time to get crackers now."
- c. By telling him to "Say goodbye."
- d. By leading him away by means of an enticing toy.

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- e. By picking him up bodily and carrying him to the next situation. Two often dislikes to be touched—led by the hand—but can be picked up bodily, as at 18 months.
- f. By warning him in advance of a proposed transition. "Pretty soon we'll go to the bathroom and then have juice."

TEACHER

Two still needs almost constant physical supervision. Added to this is his need for emotional security. Therefore it is necessary to keep the group small and to have a minimum of two teachers.

Since children of this age do not as a rule ask for help or come to get help, teachers must be alert to note when help is needed. This in regard to handling disputes, terminating play that is deteriorating, protecting the rights of individual children, protecting the child from fatigue and from physical harm. On occasion, stimulating play and widening its scope builds up the play of the group.

The teacher is now more of a person to the child and he usually knows his teacher's name. He usually responds to one teacher in preference to any other.

Sometimes the teacher can work through other, perhaps older, children when a child refuses to comply. "Betsy, will you bring Jane to wash?"

VERBAL

Verbal handling is now beginning to supersede physical handling whereas at 18 months the opposite is true. The teacher's language should be modelled on the level of the children. Typically useful phrases are: "Have clay after juice." "When it's time." "Now John can have it." "Find your hat." "This is where it fits." Emphasize important words with a positive, calm, reassuring tone.

Be ready to shift level of verbal techniques to a level above or below the child's age as the situation requires. Often 18 months' verbal techniques, as "Goodbye water" to terminate washing; or "Goodbye turtle" to terminate play with turtle, are useful. Some children, however, will be found ready for 2½ verbal techniques.

Try to get the child himself to substitute verbal for gross physical approaches to other children such as screaming or hitting in disputes. Say, "Jane can *talk* to Jimmie. Say, 'No, Jimmie.'"

Imitation of the other children's activities may be induced by use of a repetitive phrase such as, "Ann is drinking her juice, Judy is drinking her juice."

Interest in specific rather than general concepts is characteristic. The child will not respond to a general statement, as "Let's put the toys away," but may respond to, "Teddy goes in the bed," "Cars go on the shelf." Also the teacher can use the

specific when two children are fighting over a toy, to direct one of them to a similar toy. "Ann could find the *blue* carriage."

Use such popular words as "again" and "another."

There may be need for continued use of supplementary gestures to make clear the meaning of new words.

HUMOR

Humor is largely gross motor as peek-a-boo and chasing, but may at this age be initiated by the children and may be carried on by them without adult support.

OTHER CHILDREN

Two shows an awakening interest in his contemporaries. Children at this age are both an absorbing interest and a thorn in the flesh to each other. Play is still predominantly solitary but affectionate approaches such as hugging, patting, and kissing often occur. Parallel play is beginning. They also spend much time just watching each other.

One of Two's chief difficulties is his dislike to give things up and to share. He likes, however, to find substitutes for other children to use. He will respond to, "If you have the car what can John use? He could use the train. I'll hold the car while you get the train for John." Two-and-a-half can respond to just the first sentence, but Two needs more definite suggestions. Do not expect disputes to be settled "fairly" from an adult point of view. "It's mine" may have to be respected in a demanding child at the expense of more docile children. This may violate the adult's sense of fair play but does not unduly disturb other 2 year olds. They generally accept the adult's comment, "Johnny *needs* it"; whereas at 2½ they reply, "I need it."

GROUP ACTIVITY

There should not be too much planning for group activity. Since solitary or parallel play naturally predominates, group activities should be spaced and brief. All children should not be expected or required to cooperate. Flexibility is needed in music, reading and similar activities. They need to see the music (victrola) going around; they need to touch the book that is being read. Groups that can be kept within touch are best. Some children will stray immediately. Juice time is best for collecting the whole group.

TWO-AND-A-HALF YEARS OLD

§1. BEHAVIOR PROFILE

IF A GROUP of nursery school parents should cast a secret ballot to determine the most exasperating age in the preschool period, it is quite likely that the honors would fall to the *TWO-AND-A-HALF YEAR OLD* because he has a reputation for going to contrary extremes. The spanking curve therefore comes to a peak at about this time. Needless to say, we do not subscribe to this low estimation,—nor to the spanking.

TWO-AND-A-HALF YEAR OLD is in a transitional period. He is fundamentally the same interesting child that he was at two; and he is growing into the thoroughly enjoyable child of three. Indeed even now there is something delightful about his energy, his (apparently) misplaced exuberance, and his unmistakable tokens of embryonic sociability, helpfulness and imaginativeness. If these tokens are sketchy and offset by their very opposites, it is because *TWO-AND-A-HALF YEAR OLD* is at

an intermediate crossroads stage in the growth of his action system. He has to do a great deal of intermediating between his own contrary impulses. Once more we must remind ourselves that he acts that way because he is built that way. And if he is managed rather than disciplined in terms of his peculiar limitations, he becomes tolerable and amiable.

Why does he go to such trying extremes? It is because his command of *Yes* and *No*; of *Come* and *Go*; *Run* and *Stop*; *Give* and *Take*; *Grasp* and *Release*; *Push* and *Pull*; *Assault* and *Retreat* is so evenly balanced. Life is charged with double alternatives. Every pathway in the culture is a two-way street to him, because he is most inexperienced. (But remember, at eighteen months every path was a mere one-way street). His action system likewise is a two-way system, with almost equally inviting alternatives, because he is so immature. His equilibrium is unstably balanced, because his inhibitory mechanisms are very incomplete. Moreover, life and environment are so complex at this transitional stage, that he is almost obliged to go *both* ways, to experience both alternatives so that he may find out which is really the right one. Do not despair if he tries out both, and tries you. When he is 3 years old he will be comparatively so much more mature that he will actually take pleasure in being asked to choose between two familiar alternatives.

At present his capacity for voluntary choice is weak; so he chooses both alternatives, not because of downright stubbornness, but because he lacks facility in balancing alternatives and of thinking of one alternative to the exclusion of another. Instead of following one line he follows two (and one of them seems obstinate to the observer). The nerve cell organization which presides over inhibition is poorly developed. This shows itself even in such "neurological" actions as grasping and releasing. He does not have his flexor and extensor muscles in check and counter check. He tends to grasp too strongly and he releases with over-extension. He has not learned to let go. He has difficulty in relaxing readily to go to sleep. And when he sleeps he may even show a tendency to sleep too much. Similarly he may not easily release the sphincters of bladder control and

so he withholds elimination too long,—another instance of going to extremes which can scarcely be set down to innate wilfulness.

The peculiar limitations of his action system, therefore, account for his characteristic inability to *modulate* his behavior. He has such difficulty in making transitions that he tends to dawdle as though it were hard for him to go from the familiar to something different. He is so conservative that he combats innovations. He wants to have things done the accustomed way. Sometimes he is actually a ritualist, particularly at home, and insists on having things *just so*. On these occasions he may be so insistent that he seems positively imperious. His "imperiousness" is really not tyrannical; it is simply an unmodulated intensity,—the same kind of uninhibited propulsive release that he shows when handling objects. Even so, it is best to take this fictitious domineering with a grain of humor and let him be King within manageable bounds. By using a few of the techniques outlined below, you can *activate* him in the "right" direction. He cannot be forced; the activation must finally come from within himself. Our guidance teacher has revealingly told us that to handle him you must be something of a "juggler." This means that he himself is something of an equilibrist entertaining opposite alternatives,—trying to keep two balls in the air when he "should" be tossing only one. But he does this on account of his inexperience. Also he does it because it is the developmental method by which he learns opposites. Such behavior is the psychological equivalent of growing pains. It is helpful to think of him as a preschool edition of a slightly confused adolescent who has not yet found his way.

Nevertheless in this very process the TWO-AND-A-HALF YEAR OLD is finding his way. His adhesiveness, his vacillation, his oscillations between extremes are temporary. By the age of three he will amaze us with his conformance, his desire to please, his interest in making not two choices, but one. At present he is learning to make *one* by exercising *two*. And we can afford to be philosophical because he is giving us a glimpse of Nature's favorite method of growth,—the method of reciprocal inter-

weaving by means of which she brings flexors and extensors, yes and no, come and go, grasp and release, push and pull into balanced equilibrium.

These characteristic traits are not, of course, equally marked in all children. They are particularly pronounced in those of a perseverative type. High tension and sudden fatigability sometimes evidence themselves in a kind of stuttering, which is "outgrown." Equable temperaments are least likely to show conspicuous symptoms; but it is relatively normal, from a developmental standpoint, for children at this age to show to some degree the extremes which have been suggested,—the sudden shift from intense activity to passive quiescence accompanied by transient thumb sucking; shifts from exuberance to shyness; from keen desire to possess an object to indifference when it is possessed; from clamor for food to rejection of it; from shriek and scream to whispering and monotone; from herd-like imitativeness to shrinking isolation; from laughing to whining; from precipitateness to dawdling.

These swings from one extreme to another are not mood swings. They are fluctuations caused by narrowness of base. The base will broaden as the child matures, as he makes an increasing number of distinctions between paired opposites and paired alternatives. Experience will organize the choices he will make with ease at three, four and five years of age. He needs developmental time; he deserves discerning patience.

Moreover is he not at least interesting, as he so transparently betrays his intellectual limitations? And is he not attractive with all his promising mixtures of exuberance and shyness, his overtures to adults, his friendly questions, his imaginativeness, his conquests of difficult words, his socialized imitativeness, his tribal chants, and his generosity? For he *is* generous when he eagerly brings his toys to school to show to his companions, and then cannot let go of them! How can you possibly prize a toy without showing it to others? And how can you share it without keeping it? Life and culture are full of paradoxes for all of us. Two and a half years is the paradoxical age.

§2. BEHAVIOR DAY

THE TWO-AND-A-HALF YEAR OLD child may wake up at almost any time between 5 and 9 o'clock in the morning. He tends to waken toward the later hour, say between 8 and 8:30. He calls for his mother fairly promptly after waking and is immediately toileted.

If he does not attend nursery school on this particular morning, he enjoys the leisure of bathrobe and slippers while he takes a light breakfast. After breakfast he is dressed. Dressing is facilitated by the confinement of the bathroom. He ordinarily has to be helped during the whole process.

He is now ready for an hour's play in his room which is set up and pre-arranged to meet the needs of his abundant self-activity. He talks to himself a great deal during a happy, active hour. The sound of heightened gross motor activity during which he may turn over the chair in his playroom calls attention to the termination of this hour of play. His mother comes and toilets him. He likes to linger in the bathroom, but he is also ready for a session of outdoor play.

The luncheon at noon is usually his largest meal. He likes to feed himself for at least half of the meal, during which he selects the foods which he most prefers. He may assert his self-dependence by asking his mother to leave the room, but he calls her back and accepts her help for the last half of the meal, reverting again to self-feeding for dessert. He is toileted, and often has a bowel movement at this time.

The scheduled nap may begin at about 12:30, but usually he consumes an hour or more in self-activity before going to sleep. He likes to have the side of the bed down and he may get in and out of bed two or three times. He talks a great deal to himself during this pre-nap period. He may finally fall off to sleep after he has been tucked in by his mother. He sleeps for an hour or more, awakens slowly, and usually dry. He does not call for his mother until he has gone through a transitional period of progressive wakefulness.

By 3 o'clock he is ready for a walk or a visit abroad, though if he attended nursery school in the morning he may play from 3 to 5 o'clock in his own backyard. On his return from his walk he may have a snatch of play in the living room.

Supper comes at about 5 o'clock. He accepts more help during this meal than he did at luncheon. He is content to return to his room after supper and to play by himself for perhaps a full hour with the door closed. He also enjoys a round of play with his father. It may be active play: it may be more receptive,—listening to music, or looking at a book.

The bath, which comes at about 7 o'clock, is still a favorite experience. The 2½ year old likes to handle situations in a somewhat commanding manner. He insists on certain routines; likes to have things done in an accustomed way and likes to find things in accustomed places. By these demands he asserts his increasing insight into what he thinks is being demanded of him. He insists on comparable routines when he is put to bed. These are somewhat "ritualistic" and may, therefore, be time-consuming. He continues his soliloquies and also talks to his teddy bear. He may call to his mother to adjust a pillow or render some other specific help. He falls to sleep about 8:30. He may be picked up between 10 and 12 o'clock and is toileted without being awakened. He sleeps the clock around.

SLEEP

Night

Bedtime depends very definitely on the length of the nap, which can vary from no sleep to a three, four or even five hour nap. It is not uncommon for the hour of going to sleep to vary from 6 P.M. to 10 P.M. Bedtime, therefore, has to be shifted according to the child's needs, but should preferably not be delayed beyond 8 P.M.

Going to bed is also complicated by a new intrusion, for the 2 year old bedtime demands have often grown into an elaborated and rigid structure that may now take

as long as one half to one hour to enact. There is the going upstairs ritual, the taking a bath ritual, brushing the teeth ritual, getting into bed, pulling down the shades, kissing, and even a specially worded good-night ritual. If the plug is pulled out of the bathtub the wrong way the entire going-to-bed routine may be disturbed and a temper tantrum may occur. Even the shades have to be pulled down just to the proper height.

The 30-monther makes most of his demands before getting into bed. When he is once in bed and has said goodnight, he calls his parent back less often than at 2

years, and usually his demands express real needs. When he finally settles down he often sings and talks to himself. Those who have had snuggle duckies up to now may be giving them up, though some cling to them until 3 years of age and cannot sleep without them. Those who fall asleep early are more apt to awaken during the night. They may or may not cry, and often ask for the toilet or a drink. The 10 to 12 P.M. picking up for toileting is more often successful at this age than formerly, but when it is unsuccessful, the disturbance it causes is very real.

Morning waking is as variable and has as wide a range as going to sleep. With some children, the later they go to sleep the earlier they will awaken. Therefore going to sleep at 10 P.M. may cause a 5 A.M. waking. However the majority are "sleep the clock around children" and often do not awaken before 8:30 or 9:00 A.M. If they awaken early they will often play with their toys and look at magazines before they call the adult. Sometimes shifts of toys will help the early waker to stay in his crib, but after an hour or so he demands to get up. There is no problem with the late waker for he is taken right up for his breakfast.

[The child will leave pre-sleep activities more easily if he can have an active share in putting away play materials. The mother should not leave in the middle of pre-sleep preparations to attend to some other household demand. Such preparations once started must be carried through to completion, or they will have to be started all over again. If the mother tries to complete them, after an interruption, without starting again, the child may have a temper tantrum.]

Nap

The nap is often a real problem at this age. Children of this age do not usually mind going to bed for their naps and enjoy taking a number of toys to bed, but they do not stay in their cribs for long. They can now climb out with ease and keep coming out of their rooms, unless the door is tied. The 30-monther does not usually mind his door being tied as long as he can freely get in and out of his crib and has his toys in the room to play with. *The windows must be very safe*, for he is apt to climb on the window-ledge.

Many children refuse to nap in their cribs at this age. They may nap better in another room on another bed, but the novelty of this may wear off soon and then they are much worse than they were in their own rooms. If some variation (under their own control) can be made in their own room they will respond more quickly, more continuously and with less interference with the rest of the household. They especially like to sleep on the floor, under their crib, or in a bureau drawer. If they cannot handle this themselves after preliminary arrangements and suggestions have been made by the parent when they are put into their rooms, they may respond to a little help from the adult around 2 or 2:30 when they are more ready for sleep. Then the barricading of a blanket bed on the floor may be just the needed touch. Some will accept the bed if it is imaginatively turned into something else, such as a bus or a railroad train.

The parent must not only decide whether she should help put the child to sleep, but also if she should awaken him from his nap before he is ready to wake himself. A few children can have a long nap and still go to bed at the usual bedtime. With others, the displacement of the

night sleep caused by a long nap makes evenings at home a bit troublesome for the parents. However, if the child cannot stand being waked at 3 to 3:30 and merely cries for the rest of the time when he would have been asleep, it is wise not to awaken him. Some will respond well to the ring of a telephone or to an alarm clock in an adjoining room when they will not accept being awakened by a person's voice. Trial and error is probably the only way these decisions can be made. And eventually the child will handle the whole problem for himself by not sleeping at all or by taking a shorter nap.

[If a child awakes crying from his nap, wait until the cry changes to a more agreeable note before going into his room. Engage in tasks such as pulling up the shade without approaching the child until he has made an initial approach, such as saying sweetly, "Hello, mommie."]

EATING

Appetite—The appetite often fluctuates between very good and very poor. Usually one meal, either the noon or evening meal, is a good one.

Refusals and Preferences—These are quite similar to those of the 2 year old child, with the patterns of demand being held to more rigidly. In general, the child prefers meat, fruit and butter, and dislikes green vegetables. He is now taking milk fairly well.

One may think of his preferences and refusals in a gradation of those foods he likes so well that he will eat them by himself, those that he likes well enough to be fed, and those that he absolutely refuses. As at 2 years of age, he still goes on food jags and a food which was once in the first place of preference may become an outrightly refused food.

[It is best to allow swings in appetite. The parent may keep a chart if necessary to convince herself that good days balance poor days. Allowing the child to pour his milk from a pitcher may increase his appetite for milk.]

Self Help—Patterns of self help are also quite similar to those of 2 years. The parent can now readily set up a sequence of courses and can tell the child to "Call me when you are ready for your . . . dessert" (for example). The child may feed himself half of his dinner and this will usually include foods that he likes. He will then be ready to be fed the remainder of his dinner if this does not include currently refused foods.

The ritualisms of the ritualist are at this age more clearly defined in eating as well as in going to sleep patterns. He demands the repetition of foods, of dishes, and of arrangement of dishes, and even of time when a certain food is given. If, for example, egg is given at supper time it may be taken with relish but refused at lunch time.

This is the age when between-meal snacks are in greater demand; and often they interfere with appetite for regular meals. A few children eat very poorly at mealtimes but will eat well between meals.

[It is best to try to establish a set time for the in-between-meal snacks, such as 10:30 A.M. and 4:00 P.M., and to see if the child can be held off verbally until these times. Crackers and dried fruits along with fruit juices are probably preferable both from the point of view of ease of handling and of what is best for the child. Candy had best be out of sight and out of reach, even out of the house, or the demand may be very excessive at this age. Special infrequent occasions when candy is allowed establish it within the treat realm and not within the incessant demand realm.]

ELIMINATION

Bowel—The number of movements varies from one to two a day, with an increased tendency to skip one or even two days between bowel functioning. Accidents are rare. The general tendency is for the child to ask to go even though he needs no help. Some still tell after they have gone by themselves. They prefer to go by themselves and to climb up onto the toilet seat themselves even though they need help with taking off their pants. Those who have been slow to name the bowel movement, often now name it with some such action word as "plop" or "bang poo-pee."

Very few now resist the toilet seat though some seem to persist in the postural need of functioning either standing up or lying down. If the child who still refuses the toilet seat or any type of receptacle shows a localizing tendency of going to a corner of a room or behind doors, he is often ready to be shifted to the bathroom, where he may function on a paper in the corner. When once he has begun to function in the bathroom, he more rapidly adjusts to a potty chair or the toilet seat, but should not be expected to adjust to the flushing of the toilet.

Even if the mother helps to put him on the toilet, he does not usually wish her to stay in the room and requests as at 2 years of age, but now a little more personally, "You go away," or "Mommie go downstairs?" He now can leave on his shoes and socks and shirt, but wants his pants or overalls all the way off.

As was also true at 2 years of age, he will call out, "Mommie, all through," and wait to be wiped and put back into his clothes.

The time of occurrence has a wide variation, with some still having a meal relationship and others being more irregular, with

a definite trend to having the movement in the afternoon, especially in relation to the nap. The child usually asks to go at these times. Stool smearing is relatively rare at this age.

[Though it is common for children to skip one or two days at this age between bowel functionings, the parents should check on this, and if the interval is longer than this, fruit laxatives may be given. It may help the child to function to have the adult remain in the room, or to allow the child to look at a book.]

Bladder—There are very few daytime accidents. Most children go by themselves, according to the ease of removing their clothing and facilities available for climbing up on the toilet. Some, however, always tell beforehand, even though they need no help. They do need verbal help, however, such as being given permission to go. This is an age for long spans, especially with girls, who often have a morning span of as much as five hours (from rising till after lunch).

When they hold off too long they may start to dampen their pants before reaching the bathroom. They are very conscious of wet pants even though the wetness is only a drop, and want to be changed at once. (This type of long span and holding off is more common with boys from 3 to 3½ years of age). Many find it difficult to urinate on a strange toilet.

[If the child has difficulty in urinating after a long span, he may respond to such helpful stimuli as the sound of running water, or taking a drink. It may help to tell him to close his eyes and listen for the sound that the stream of urine will make.]

Those who do not tell can be readily routinized. This function is now coming so much under the child's own control

that he is beginning to be conscious of the control of others. He is interested in watching other people go to the bathroom and also is very much interested in watching animals out of doors. However, he usually reserves his comments until 3 years of age. Boys often urinate out of doors if they are allowed to.

It is difficult to generalize about nap dryness because individual differences are so marked. Some who have previously been dry, especially boys, are now wet again. Girls are more consistently dry. The length of the nap may have something to do with the relapse since the nap is now sometimes two or even four or five hours long. Therefore they may be dry if awakened from the nap, wet if allowed to sleep it out. The consciousness of being wet is probably most dependent on cultural handling, and with adult stimulation of shame, an opposite response on the part of the child of pride in a "methy bed" may be elicited.

Dryness at night is dependent upon a number of factors. There are a few children who go through the night without wetting. These may go through the night without waking or may call two or three times during the night to be taken to the bathroom. The majority, however, need to be picked up and even then may still be wet in the morning. If they are wet by 8 or 9 P.M. the chances are that they will wet two or three times more during the night. If they are dry at 10, the chances are fifty-fifty that they will be wet in the morning. If they are still dry at 12, they will usually be dry in the morning. Picking up is, however, not a simple matter, for many children resist it. With any sign of resistance the practice should be discontinued until later acceptance. Picking up is more palliative at this age than instructive. Rubber pants and diapers are still in order to make

the child more comfortable physically and emotionally, to restrict the laundry and to eliminate the uriniferous smell which can be so distasteful in a child's room.

BATH AND DRESSING

Bath—The bath, which is now given around 7 P.M., is quite a favorite at this age. As with most of his activities at 30 months, the child "takes over" even though he is not capable. He wants to handle the faucets and the plug and to build up a ritual around them. He also likes to shine the fixtures and has often lost all sense of the bath as being a time when he is washed. He loves to slide back and forth in the water and would go on endlessly if not stopped.

Getting the child out of the tub is quite dependent upon the ingenuity of the parent. The removal of the plug with the subsequent running down of the water makes some children fearful that they will be sucked down, too. Therefore they hop out at once. But there are many who are not in the least fearful and who continue to slide back and forth even when the water is all out. Then tricks of getting out, as counting or any other helpful transitional devices, need to be used.

Dressing—The 30-monther is still better at undressing than at dressing. He can usually take off all of his clothes but his dressing abilities are limited to putting on his socks and sometimes his shirt, pants or coat. His dressing is not, however, very effective and usually needs correction. The heels of his socks are almost invariably on his instep, both feet are in one pant leg, his shirt is on backward and his coat is often twisted. If he insists upon dressing by himself, he will usually accept helpful preliminary

orientation of the garment, i.e., the shirt on the floor with the back uppermost. He will also accept some verbal help but will not allow his mother to touch him.

This demand for independence alternates with a demand for complete dependence when he will not do the things he can do for himself, and even withdraws from the most rudimentary beginnings of helping with dressing, such as thrusting his arm into an armhole. At this time he may go limp and say he is a doll or a baby. If the parent is not fully aware of the swings of the 30 month pendulum, or will not accept them, she will undoubtedly get into trouble.

This is the age when temper tantrums over dressing are common. Besides his demands to dress himself or be dressed, the child often runs away as soon as his mother starts to dress him. He particularly enjoys being chased and as soon as he is caught he runs off into another room or corner. He becomes violent if he is really caught and picked up, but usually comes running if he is left by himself with the suggestion, "Come to the bathroom when you are ready." If the mother closes doors behind her, this will almost immediately martial the child's forces to right about face and he runs in the direction which the mother desires. He comes calling, "I'm ready, I'm ready." When he is once in the bathroom it is wise to close the door and even to lock it. A high hamper is a good place on which to dress a child of this age. He fools less because he does not want to fall off, and he wants to have dressing over with so as to get down as soon as possible.

[The game of discovering parts of the body, such as the head, hand or foot, as they emerge from clothing, is a delightful game at this age.]

SELF-ACTIVITY

If the 30-monther is attending nursery school three times a week, his morning play period at home takes on a new character of relaxation and of re-discovery. He is happy to go to his room after breakfast, but with his proficient ability to right about face, he will just as rapidly reverse his direction if his room is not sufficiently attractive and enticing. Therefore it is very essential to set up his room as though it were a stage, with the planned beginnings of spheres of interest—a doll corner here, fitting toys over there, a magazine on the bed and a tray of plasticene on the table.

The child is usually happy to linger in the bathroom washing his hands and making soap bubbles while the mother is accomplishing this bit of stage craft. As a last touch she might hide something under a box for him to discover. His interest is quickly secured, he leaves his washing, and is whisked into his room. While the door is being shut, and tied (if necessary) he is discovering his "surprise," and then happily sets about his morning activities.

His play is accompanied by constant talking. All of his past experiences are flooding in in bits of this and that. There is something enchanting about a verbatim record of the speech of a 30 month old child talking to himself in his room as he plays. Speech is now coming in with a rush and it is so uppermost in his mind that he uses it constantly. Words and activities that he has been hearing and observing at home and away from home are now put into practice in the simple security of his own room. Seeing his doll reminds him to put it on his lap the way grandmother does, or to tuck it in bed the way he saw it done at nursery school.

His play and equipment are similar to

those of the 2 year old child. There may be the addition of a bed, an iron and ironing board in the doll corner, a few extra cars on the shelves, a simple puzzle and sometimes plasticene. Scissors and crayons are not yet sufficiently under his control for him to handle alone in his room, though they are definitely in his realm of interest. Even plasticene may at times be too difficult for him to control, and he is then likely to spread it all over the room.

Some children want all their toys within sight or reach and have a strong sense of ownership and place for them. They are very orderly with their toys and stand guard as the room is being cleaned so that nothing will be disturbed. The majority of children, however, have only a momentary relationship with their toys. They actually do better with a shifting scene. Therefore the mother in her preliminary arrangement decides what is best for the child at the moment. He may even help her decide by asking for certain things. It is impractical to have either too many things in a child's room or too few. Some desire play with only one or two fitting toys whereas others demand variety.

When the 30-monther has finished with a toy he drops it, often in back of him. He may, however, return to it later. With fatigue, usually at the end of an hour, he shifts to more gross motor activity, jumps off a box, runs into a closet and closes the door, and finally may end by turning over all of the chairs. He may occasionally return to wall paper or plaster destruction. If he does he has improved his technique and is now using some object as a tool to increase his efficiency.

With the sounds of gross motor activity, the mother knows it is nearing time for shifting to out of doors. Nothing delights the 30-monther more than to have his

mother knock on his door at this moment and to invite her to "Come in." If she knows the ways of development she will not say, "My, what a mess your room is in"; but will rather say, "My, what a wonderful time you've had."

She will also know that this is no time for him to help in re-ordering the room. Toileting and out-of-doors where space and bodily movements are freer should follow immediately. His 2 year old outdoor play equipment is still of interest to him. He can also handle hollow boxes which he loves to lift, carry and jump from, and he enjoys paper cartons that he can climb into. A pail of water that he can dip into and pour on his sand delights the 30-monther. He plays happily until it is time for lunch and then often does not want to leave his play. It is then up to the mother to lure him into the house without his realizing that he is being lured.

[Successful lures include the mother's mentioning some preferred food, giving the child something "important" such as a loaf of bread to carry into the house, or playing the game of "find mommy" when he knows from previous experience what door she is hiding behind.]

SOCIALITY

The ritualism so characteristic of 30 months may weigh heavily on the entire household. The child of this age is likely to know where everything belongs and to insist that everything remain in its place. This is no time to rearrange the living-room furniture. Chairs must be placed at specific angles and certain pictures must remain on certain tables.

This is the age when father learns to hang up his coat, for his 30 month old child may not tolerate his throwing it down on

a hall chair. The child is, however, much more efficient about handling other people's affairs than his own which are often in a very chaotic state. He also may remember exactly how all household routines have been conducted and may insist always on an exact repetition. Father must put on his bedroom slippers whether he wants to or not. Milk bottles must be brought in only by the child. If he gets up late and finds the milk bottles in the ice box, the only thing to do may be to put them back out on the porch, close the door, and then go through the whole routine as though nothing had occurred.

His imperial domineering ways are sometimes hard for others to accept. He may command one to sit here, another to do something else, and still another to go away. If the parent realizes that the child is only passing through a temporary regal, dictatorial stage, he may respond to the child's orders more graciously, more whimsically. The child actually needs to be treated with a little subservience to take him off his guard. A little humor added to the subservience may produce the desired effect.

During his imperiousness the child may actually be a very useful member of society. He may be of considerable help in putting things away and in carrying out simple household tasks such as emptying the ash trays.

He is usually more independent on his walks and he is apt either to run ahead or to linger behind. He makes definite requests as to what he wants to do, and carries out going to a destination with real dispatch. However on the homeward journey he is apt to lapse into dawdling or going up other people's steps. Therefore it is wise to have some means of conveyance such as a wagon, a doll carriage in which

the child can ride, or a stroller, to help him home again. One either stays close to home, or encompasses distances in a car. The afternoon social play period in the house still includes music, dancing and books. But the child also likes to color with crayons, to snip with scissors and to do puzzles with help.

Most children at this age exhibit a definite preference for either father or mother, though the preference varies from child to child. Sometimes the child prefers one parent for one time of the day and for certain activities and the other parent at some other time of day. He is usually less dependent than he was at 24 months. His affection has not the overflowing warmth of the 2 year old's, but is often expressed in a rigid pattern of something to be gone through, such as a kissing ritual. As with the 2 year old he is more apt to demand his mother when he is in trouble and during the middle of the night. However, he may quiet more quickly for his father, if he will accept the father.

The shyness and withdrawal of Two have now gone into reverse. However the 30-monther includes both poles of shyness and withdrawal on the one hand and approach and aggression on the other hand. He responds according to the demands of the situation. He may demand his mother's hand when he meets a stranger on the street or he may suddenly "sock" a stranger with few or no premonitory signs.

He wants very much to be with people, both adults and children, but he cannot handle them. This is the snatch and grab age, especially when he is with younger children. However the same child may swing from a period when he is habitually too compliant to one when he is too domineering. On the whole he plays best

with one other child out of doors, and he does much better with a 5 or 6 year old child whom he respects and also accepts. Play with children of his own age is often best handled under supervision, away from home, for instance at nursery school.

Some children play best at their own homes with other children, others play better away from home. Those who play best at home are usually the ones who adjust poorly to new places. But they are also the ones who have difficulty in letting other children play with their toys. Therefore it is best to plan with them to put away their most prized possessions before another child comes to call. Then it is

easier for them to share their less prized toys.

Those who play better away from home are more often the quick adjusters, the quick shifters. They want novelty and find it easy to adjust to the child who clings to the old. To lead these two types into a fuller realization of themselves, the environment helps the stay-at-home child finally to release his home and his things by going abroad, whereas it helps the going-abroad child to hold on a little tighter to the things at home by adjusting him to play with other children at home. This process of adjustment to others becomes more urgent at this 30 months period.

§ 3. CULTURAL AND CREATIVE ACTIVITIES

BOOKS

1. Pretends to pick up objects from pictures, pats kitty, etc.
2. Spontaneous language (of the child) is often rhythmical and repetitive.
3. Enjoys rhythm and repetition in rhymes and stories.
4. Wants repetition of same story day after day.
5. Slow acceptance of new story.
6. Attends to short, simple stories of familiar subjects, as "The Little Family" and "The Little Auto."
7. No demand for plot in stories but enjoys a simple one, as in "Cinder."
8. Likes books giving simple information about animals and transportation, as "Ask Mr. Bear" and "Saturday Walk."
9. Enjoys having adult improvise story about what the child does throughout the day or what his contemporaries are doing.
10. From 33 to 36 months wants to hear elaborate details of the babyhood of himself and later of each member of his family and friends. The story of "Little Baby Ann" is a favorite during this stage.
11. Reading in which he takes some part holds him longer, as naming kinds of animals or filling in words or phrases of a sentence he knows.
12. Enjoys looking at books alone.

MUSIC

1. May know all or parts of several songs which he reproduces at home or spontaneously at school, but is often inhibited in singing with others in school.
2. Spontaneous singing on minor third of such phrases as "coal man, coal truck."
3. Absorbs music and particularly enjoys repetition of old, familiar tunes.
4. High interest in listening to instruments, especially victrola.
5. Enjoyment of marked rhythm as Ravel's "Bolero" or band music.
6. Musically talented children with sensitive ears may show fear of victrola at this age.
7. Less individuality in rhythms because of imitation and awareness of others.
8. Majority of group will run, gallop, swing, etc., to music, watching others.
9. Enjoys simple group activity as ring-around-a-rosy.

PAINTING

1. Experimenting with vertical and horizontal lines, dots and circular movements.
2. Good form at beginning but generally quick to deteriorate.
3. May go out of bounds, painting on table, easel, floor, own hands, other children.
4. May paint many pages with little variety.

FINGER PAINTING

1. A better medium for this age than painting on easels because hands are in direct contact with the medium and do not have to adjust to a tool and container, such as brush and paint jar. Since this is a tangled age, the simpler medium is preferable, because it does not add complications.
2. To see the enjoyment of a child having his hands legitimately in paint, makes one know the wise choice of this medium.
3. Needs more supervision than at any other age. Stimulus of group in school controls it somewhat, but apt to go far out-of-bounds at home.
4. Pure enjoyment of manipulation and color with little feeling for form.

CLAY

1. Excellent medium for this age because each child can have identical materials for parallel play, thus reducing to a minimum the characteristic desire for the equipment of others.

TWO-AND-A-HALF YEARS OLD

2. Good medium for working off tangles and surplus energy by pounding, squeezing and poking.
3. Affords relaxation as it inspires a long span of attention, which is seldom true of other materials.
4. Out-of-bounds behavior can be legitimized and interest span lengthened by using other materials in combination with clay, such as tongue depressors, cars and animals.
5. Like to pass products around to each other, naming them pies, cakes, etc.

SAND, STONES, WATER

1. Makes pies and cakes with sand and mud, patting and smoothing them.
2. Continued high interest in water, which is also an excellent medium for this age. Likes blowing soap-bubbles, "painting" with water, washing clothes and hanging on line, sailing boats and scrubbing.

BLOCKS

1. Continued vertical and horizontal building with beginning of symmetry.
2. Some simple structures are named, as bridge, bed, tracks.
3. Sometimes blocks are used imaginatively as coal, ashes, lumber.
4. Uses larger blocks more than when younger.
5. Some color matching with blocks.

POSSESSIONS

1. Brings favorite toy to school to show to others, but generally not able to share it with others. May bring same toy each day. Is happier if toy is stored out of reach of others until time to go home.
2. Clings to favorite possession when insecure.
3. May cling to old clothes and dislike new ones.
4. Especially fond of hats and mittens.
5. May go through elaborate rituals with possessions at home.
6. Interest in acquiring possessions of others, but seldom plays with them.
7. Like to have a few pennies in their pocketbooks and are very possessive about them.

EXCURSIONS

1. Enjoys going to the park to see other children or to use play equipment.
2. Likes short excursions to nearby farms to see animals or flowers.

3. Enjoys watching trains go by at a distance.
4. Beginning to have thought of a destination in mind, and may even insist on going along a special route.

§4. NURSERY BEHAVIOR

THE TWO-AND-A-HALF YEAR OLD does not make transitions readily. He likes to do certain things in just the same way that he has done them before. He shows a kind of tenaciousness (rather than obstinacy!) which makes him resistant to change. And he has other private reasons that we know nothing about for the deliberateness which makes him seem a dawdler. He moves slowly in the short journey from the street to the entrance of the Nursery. He insists on coming by a standard route and himself lifting the latch as he and custom demand. His mother reports that at home, "He is the same way!",—almost ritualistic in his insistence on certain routines. However, he dismisses her with a more or less perfunctory "good-bye" and perhaps a kiss.

He attempts to undress himself, and makes a show of taking over the whole procedure, but usually the guidance teacher must come to the rescue with her assistance. He asserts his independence by saying, "Me do it myself!"

Preliminaries and rituals done, he makes for the nursery. He walks into the playroom and first spies a cart, takes the handle of it, but quickly changes his mind, drops the handle and grabs a car. But four of his contemporaries are already in the room, and problems of interpersonal relations arise very promptly. Let us designate these children by initials as follows: A and B are boys; C, D, and E, girls. These five children scarcely constitute a community, even under the mandate of the guidance teacher; but they do create a sociological mixture of independent, parallel, non-cooperative and incipiently collaborative activities. These activities are so intermeshed that nothing less than a play-by-play account for a period of fifteen minutes can tell the story.

TWO-AND-A-HALF YEARS OLD

9:12 A walks into the playroom, spies a cart, seizes the handle, pulls the cart a short distance. Drops the cart and grabs a tractor. B comes up and tries to take it away from him. Both say "Mine" in loud, angry voices and pull at the toy. When the teacher asks, "What can B have?" A replies, "Fire engine. I want zese sings." After getting the tractor, he runs to the animal box and squats before it. Takes toy animals out onto the floor asking C, "What zis sing? You broke that one off."

9:14 Throws one of the animals. Tries to pull several at a time out of the box. Closes cover of box, kneeling before it. Plays on the floor with an animal. Then runs over and hugs D, at the same time trying to take her toys from her, saying, "I want zese sings." Tells D she broke one of the toys. "I can't fiss 'em no more." Doesn't notice when D walks away. Pushes a tractor across the floor and watches as it rolls away.

9:15 Goes over to where teacher is helping children build a "car" of the big construction blocks. Says "I wanna bridge." All sit in car but A, who leaves and goes to a shelf in the corner for small blocks. Others sit in the car, pretending to go for a ride. A returns with small "driver" blocks. He grabs E's driver, trying to give E a different one. E holds both, saying loudly, "No, no, no." A says, "I'm goin' down in the cella" (under the block car), and slaps E.

9:17 Allows the teacher to lead him to the "cellar under the jungle gym." Says, "I need a screwdriver." All in the car watch him intently. B climbs out of the car and says he needs a hammer.

9:18 A comes out from under jungle gym and pounds at side of gym with block "screwdriver" which teacher has given him. B does same thing on other side of gym.

9:19 A gets another block from the shelf and then climbs up steps into the jungle gym, pounding from inside. Throws his blocks and then climbs way up the side of the gym. Complains that B, who is shaking the gym, "Makes me fall."

9:21 A climbs down stairs toward teacher and takes "screwdriver" which she gives him from a basket of blocks. Then grabs the basket and selects another block. Several other children run over, saying, "I want a screwdriver too." A returns to the gym and pounds again, then goes to the shelf for still more blocks. B says, "Here, A." A pays no attention.

9:22 A goes over to the table and picks up toy telephone. Lifts the receiver,

paying no attention to B who has followed him. A says, "I'll call, myself." Sits, throwing leg over chair, and takes up receiver, getting cord tangled as he does so. Holds receiver in right hand and dials with left, saying, "Speak to Daddy please? Daddy?" Listens, dialing. Replaces receiver; lifts it again; dials. Replaces. Picks nose. Receiver off again, in one hand, puts to ear, looks around room, staring at teacher and at E, holding receiver to ear.

9:24 B wants to phone. A says, "That one over there." Dials again, again saying, "Daddy? Daddy, I'm at school." Repeats whole performance. Says, "I want zose turtles, please"; and takes toy monkey from C. Then D comes over and tries to take monkey from him.

9:25 A goes over to B and tries to push B out of the chair. Says, "It's mine." B says, "It's mine." C puts her arms around B, from behind, and says, "It's B's."

9:26 A goes over to where children are building with large blocks. Says, "I say, I want to build this way, I say. I go along tunnel. *Get that big board away!*" Has very definite ideas about where things go and removes blocks placed by the others.

Similar activities continue for almost an hour. When an entanglement threatens to become too intricate the guidance teacher intervenes by introducing a new material like modelling clay, which can be parcelled out to all the members of the group. This permits congregational parallel play and reduces the tensions for the time being. The plastic clay has a mollifying effect. Each child picks off small lumps, pats them flat on the board, and then returns them to the mass for another lump. A pie, a cake, a snowman, and a worm take shape. The sculptures may be named spontaneously. The guidance teacher demonstrates rolling of the clay between two hands. The children imitate readily but crudely. Some tire of the clay sooner than others.

The sticky hands are now ready for washing. The teacher announces conversationally that, "It is time to wash hands." The children as they finish modelling go a few at a time to the washroom. The 30-monther washes his hands in a purposeful manner with back-and-forth but not rotary rubbing. He is now comparatively efficient and does not indulge in repeated and supernumerary washings after the manner of the 2 year

old child. He is toileted unless, as often happens at this age, he shows temporary resistance, or has an unusually long span.

On re-entering the nursery room characteristic self-dependence asserts itself and each child tends for a while to engage in independent activity: one looks at books; one builds with large or small blocks; others play with manipulative toys; or chase each other about the room. One child builds a tower. The tower persists in falling. He empties a whole basket of blocks onto the floor, puts the basket over his head, and hurls the basket into space; and then stands sucking his thumb, defeated.

With such symptoms premonitory of possible fatigue it is time for serving the mid-morning juice. The guidance teacher hands each child a napkin to take to the table. Our typical TWO-AND-A-HALF YEAR OLD goes to the cupboard for a cup and then returns to the table, waiting for the group to collect. He helps pour the juice, empties his cup in a few gulps. He indulges in very few words during the refreshments. It takes about five minutes to finish the mid-morning luncheon. He leaves the table in a decisive manner and on the suggestion of the teacher dabs his mouth with his napkin, puts the napkin in the cup and places it on the tray.

At this time it is customary for the nursery group to break into small sub-groups of three or four who gather about the teacher to look at books, and to listen to stories read from the books. In another ten minutes the children are ready for an hour of free play out of doors.

The 2½ year old child acquiesces quite passively in having his outdoor things put on. He helps a little by thrusting his arms into sleeves and hands into mittens, but for the most part leaves the task up to the teacher. Dressed, he hurries to the outdoor play yard.

Out of door play follows the general pattern of indoor play. Each child appears to play by himself, following his own devices; but little groups form themselves in the sand-box, on the jumping board, or at some other center of interest. Once congregated, each child again appears to follow his own devices; but they join in mass imitation on slight provocation: let some one begin to throw sand outside the sand-box with a large

spoon, the others follow suit. When one child starts jumping up and down, with both feet, on the jumping board, so do the others, often causing considerable confusion. The sight of a man going by causes one of the children to call, "What you doing man? What you doing man? What you doing man?" This chant is taken up by the whole clan. The children rather hoped that the man himself would join in by repeating their chant.

Although much of their activity is communal, imitativeness and acquisitiveness are poorly differentiated. There are enough spoons and pails for all, but if one child takes a pail of sand from the sand-box to a different part of the yard, he is usually followed by a would-be snatcher and a tussle often ensues. TWO-AND-A-HALF YEAR OLD has a fairly robust sense of possession for himself, but not for others.

There is a great deal of activity and moving about the yard, but most of the activity is self-centered. There is little variety and play does not build up as a result of group stimulation. On the contrary it is apt to disintegrate into running and shrieking. Occasionally one child holds out a helping hand to another. More often it is a pushing or a clutching hand. These engagements however may not be aggressive; often they seem to be without emotion, even when one child is hurling sand at another. (This may be in direct contrast to the strong emotion often shown in a similar situation at home.)

After about an hour of outdoor play it is time for the children to go home. They do not have a spontaneous sense of time. It is not easy for them to detach themselves from the activities in which they are engaged. The TWO-AND-A-HALF YEAR OLD on leaving the nursery shows the same kind of adhesiveness which he displayed on entering. His attachment to familiar objects may be so great that he renews his contact with them once more before he goes; he touches them one by one as he makes his exit

§5. NURSERY TECHNIQUES

PHYSICAL ENVIRONMENT

Environmental handling is most important at this age. Doors should be shut; distracting materials removed.

Two small rooms are preferable to one large one. This makes possible shifting the group from one room to another, or the isolation of one child or of small groups.

Climbing apparatus indoors as well as out is most desirable at this age.

ADJUSTMENT

Most children adjust easily at this age. There are few adjustment problems. The mother may still need to slip out; or the child may require a formal goodbye. Usually children of this age, with their interest in school, are oblivious to their mother's departure.

The shy child may adjust best if the teacher pays little or no obvious attention to him and makes her approaches indirectly.

ROUTINES

Children of this age enjoy a few routines such as washing, toileting, and mid-morning lunch. They cooperate in dressing and undressing on some days but on others the adult may have to do most of it.

Their ability to rest on cots varies, but in any event rest should be short and may be more relaxing if accompanied by music. Rest should not be forced or continued if it meets with too much resistance. This age group often relaxes best merely by sitting in a comfortable position looking at books. Shifting to a room other than the playroom is more conducive to relaxation.

TRANSITIONS

This is a perseverative age. Transitions are difficult. Expect a slow adjustment to new materials, a strong holding on, and slow release even after interest has waned.

Do not try to hurry children too much, since two and a half is a strong dawdling age. If rituals have been set up by the child, make use of them instead of trying to break them down.

Verbal handling alone can be used to effect transitions much more successfully than at two, when verbal handling had to be supplemented by physical handling or by a lure.

NURSERY TECHNIQUES

TEACHER

Do not trust the child too much. He appears self-reliant and unneedful of restraints, but cannot really be relied upon. His repetition of a rule or prohibition does not mean that he can carry it out. This is no age for promises from the child. "Me do it myself" cannot always be carried out. "You do it" may express a real need for help.

Children may need adult direction in their play at this age. They are often not sufficiently mature to carry out their own ideas unaided, and deteriorate without adult assistance.

Give yourself and the child leeway so you both will not lose face in situations. By saying, "You *have* to wash your hands before juice," you may get resistance from the child, and the adult may have to back down. Save face by suggesting, "You need to wash your hands," and if the child resists, say, "Maybe tomorrow you will be ready to wash your hands."

Never make too much of an issue of discipline with two-and-a-half. Comprehension is low at this age and disciplining emphasizes contrariness and fosters repetition.

Do not expect children to respond to direct questions or to direct commands. Do expect them to respond to a statement which has *meaning* to them, if it is made with assurance. For example, "Now it's time for juice. First we wash hands," or "*First* we wash our hands *and then* we have juice."

Use other children in the group, as in noisy situations. Say, "Dicky doesn't like so much noise. It hurts his ears." "Dotty uses a whispering voice." These suggestions often do not work immediately but are for future reference. The immediate action is to take the noisy child out of the group—preferably outdoors.

The child at 2½ deteriorates easily and the group follows in a mercurial flow in a negative direction. A complete shift is essential when this happens.

VERBAL

Verbal handling has now superseded physical handling. The child's rapidly increasing comprehension and use of language make it possible for both the teacher and himself to express themselves through language.

(The reader will note that most of the techniques discussed at this and following ages are verbal in character.)

Certain key words help to organize the child's vacillating tendencies and thus give him a thrust in the forward direction. Some of the most potent words are "Needs," "Have to have," "When he's finished," "It's time to," "You forgot."

TWO-AND-A-HALF YEARS OLD

Questions may be used advantageously to activate the child if he demands answers that he already knows such as, "Where does your coat go?" "What did you forget?" "What do you do with your cup?" Avoid questions that can be answered by "No" such as, "Can you hang your coat up?" which is usually answered by "No."

HUMOR

If you treat the more annoying characteristics of the 2½ year old such as perseveration, vacillation, and negativism by using them in humor, you not only give them a legitimate outlet but also loosen their grip. Use these characteristics as foils for activating techniques; for example:

Perseveration and Vacillation: "No, no, no." Adult: "Yes, yes, yes," etc., with laughter.

Negativism: Ask silly questions that are answered by "No."

"Does Nancy go home with Panda?" "No."

"Does Nancy go home with Daddy?" "No."

"Does Nancy go home with Mary?" "Yes."

(When Nancy has had trouble, formerly, going home with Mary.)

OTHER CHILDREN

The teacher needs to have a wealth of techniques to draw upon, because more disputes occur at this age than at any other. Disputes are best handled with the teacher on hand to give the children sufficient suggestions, but also sufficient leeway to settle things according to each individual's needs. Often at this age the more mature child gives in to the less mature. The solution will often not conform to adult standards of justice.

Substitutions are still one of the best methods of handling disputes. "What else can you use?" or "What can we get for Bill, then?" etc. Some children are not able to give things back to other children, but like to find a substitute for the other child to play with. The runaway teaser will return toys in response to, "You *could* give it back to Dicky."

Take advantage of the fact that the child is beginning to use substitution techniques himself, not directed by the teacher. For example, Dotty wants to get her monkey away from Bill. She says, "Bill, I need that monkey. Bill wants to get dressed now to go out of doors?"

GROUP ACTIVITY

The quality of 2½ year group activity is fluctuating because of the unpredictability of the individuals composing it. Some of the stormiest days which appear

NURSERY TECHNIQUES

tangled and give the guidance teacher a sense of failure may in reality be the precursors of more coordinated group activity.

Rising tension at this age may be relieved by the adult's setting up parallel group play, with each child using identical material such as clay, beads, etc.

Though parallel play still predominates, there are glimpses of cooperative group play including two or three children. Children may sit momentarily in a block train, may bring medicine to a "sick" child, or may pull others in a cart.

THREE YEARS OLD

§1. BEHAVIOR PROFILE

THREE is a coming of age. The strands of previous development converge and come to a focus. The conflicting extremes of a half year ago give way to a high degree of self-control. For one so young the 'THREE-YEAR-OLD has himself well in hand. Far from being contrary, he tries to please and to conform. He even asks, "Do it dis way?", as though he were sensitive to the demands of culture. He is susceptible to praise and he likes friendly humor. He is remarkably attentive to spoken words, and often displays a quaint seriousness. If a group of nursery school parents should again cast a secret ballot to decide on the most delightful age of the preschool period, the honors would perhaps go to the THREE-YEAR-OLD, even if once upon a time he was TWO-AND-A-HALF.

The greater self-control of three has a motor basis. He is more sure and nimble on his feet; he walks erect, and he can turn sharp corners

without going through the studied manoeuvres of earlier months. His whole motor set is more evenly balanced, more fluid; he no longer walks with arms outstretched, but swings them somewhat like an adult. He likes to hurry up and down stairs, but he also enjoys sedentary pastime which engages fine motor coordination. It is significant that he can delimit and orient his crayon strokes sufficiently to imitate the drawing of a cross. He has an eye for form, which suggests that the small muscles which operate his eyes are more facile than they were. He also has gained considerable inhibitory control of his sphincters; and he can almost toilet himself during the day. Not to overlook another domestic detail, he can unbutton buttons without popping them!

There is something "threeish" about the scope of his attention and insight. He can repeat three digits, he is beginning to count to three; he enumerates three objects in a picture; he is familiar with the three basic forms, circle, square, and triangle; he can combine three blocks to build a bridge. Many of his sentences and questions consist of three units. He likes to compare two objects and this requires a three-step logic.

He listens to words with increased assurance and insight. He even likes to make acquaintance with new words, apparently intrigued by their phonetic novelty. He has learned to listen to adults and he listens to learn from them. He uses words with more confidence and with intelligent inflection; although he may not overcome infantile articulations until the age of four or five. For practice he soliloquizes and dramatizes, combining actions and words. He creates dramatic situations to test out and to apply his words. In this way he extends the range and depth of his command of language. These action-thought patterns like his postural patterns will come into evidence in his nursery behavior.

The group life of the nursery will also reveal the advances which he is making in his management of personal-social relationships. These relationships are the most difficult and complicated which the growing child has to encounter. Nature has endowed the THREE-YEAR-OLD with an interest in persons. He watches their facial expressions for the purpose of finding out what these expressions indicate. He is not reading

from a book; but he is reading the expectations of his elders. He is making an important distinction between a physical obstacle and a personal one. Sometimes, however, he still strikes out at either, in spite of the fact that he generally desires to please. He is capable of sympathy. The infantile indifference has gone with other ineptitudes. Emotion as well as intelligence grows.

His sense of time is meager but well defined within his limitations. He distinguishes between night and day. He can say and understand "When it's time." Accordingly he can be put off a bit by the culture, and he can hold himself in anticipation. In other words, you can bargain with him, and he can wait his turn.

This constitutes a remarkable psychological advance and betokens well for the future,—if the culture is able to organize his growing capacities for mutual aid behavior. These capacities and his limitations are revealed in the ordered freedom of a well conducted nursery group. But it should be remembered that his cooperativeness is only in a nascent stage. He is still a preschool child. His collaborations in the nursery will be desultory, sketchy. He must also develop independence through solitary play. Too much must not be expected of him.

§2. BEHAVIOR DAY

THE WAKING HOUR is still variable although the margin of variation is not quite as large as formerly. The 3 year old child may wake at, say, 7 o'clock. He may wake dry. Often he whines a little during this first waking and calls to his mother, who promptly toilets him. If he still seems tired, as often happens, he goes back to bed, perhaps to doze off for a supplementary nap. Such an awakening is a thawing out process. By 7:30 he may be ready to come into the parents' room, and now, being thawed out, he likes to romp rather actively on the floor or bed.

He dresses while his parents are dressing, needing only a little help along the way.

He breakfasts alone in his room at about 8 o'clock and manages the meal almost entirely alone. He may even toilet himself. He is growing more self-reliant and he likes to help others when he can. Accordingly, he lends a hand in clearing the breakfast table; he carries the silverware. He assists in getting his own room in order.

He is ready for a session of independent play at about 9 o'clock. This play is somewhat less harum-scarum than it was half a year ago. When his mother comes for him he gladly helps her put his toys away. He goes to the toilet on slight suggestion.

By 11 o'clock the day's program may permit him to accompany his mother to market. It is a welcome experience supplementary to nursery school on the previous day. He also likes to go out doors for a tricycle trip or for a round of play on the domestic back-yard gym.

At the end of the play period, he goes to the toilet on a casual hint and washes his hands after a fashion by himself. He has his noon luncheon in his own room. This, as at $2\frac{1}{2}$ years, is his best meal. He manages most of it alone. He likes to have his mother near. She intercedes with occasional help but she does not have to complete the meal for him to the same degree as formerly. The luncheon is still best served in courses.

At the next toileting he may have a bowel movement.

The routines of the day do not have to be rushed. He makes comfortable transitions and adaptations. He feels his own increasing independence and demands that his afternoon nap at 1 o'clock should be a "play nap." This is a relaxation and rest period. He utilizes it for that purpose. He gets in and out of bed a few times and he may finally fall asleep without further aid from his mother. He is content to play at "napping" from one to two hours. If he should not fall asleep, he presents himself to his mother as if to say, "Time is up." If the allotted time is not up, he returns to his "play napping" usually without protest.

He goes to the toilet again on suggestion at 3 o'clock. He needs very little help in this toileting.

He likes to go on an excursion to a friend's house in the afternoon. He plays best out of doors.

On returning home, he is not likely to make any excessive demands. He likes to help in the preparation of the evening meal and even initiates suggestions as to the things he would like to have for his supper, which occurs at about 5:30, and is again best managed in his own room. He needs, perhaps, a little more completion help from his mother at this evening meal.

He plays contentedly until about 6:30, often preferring dramatic or puzzle playing. He enjoys a half-hour of play with his father. He is fond of quiet social play, listening to records and to stories.

The bath may still come at about 7 o'clock. Again he is interested in helping with the arrangements but his "ritualisms" are much less rigid. They are developing into more adaptive cooperation. Time-consuming demands are abating and he is in bed by about 7:30, and may fall asleep within a half hour. He does not need much external assistance in achieving release into sleep, but his mother may tell him a simple bed-time story about what he did when he was a little baby.

He may not need to be picked up during the night for toileting. He sleeps the round of the clock.

SLEEP

Night

There are many tag ends of 30 months' behavior that linger on into 36 months. The maturity of the 3 year old during the daylight hours seems slowly to leave him as night approaches and he again becomes, at least in part, what he was before. He is, however, giving up much of his ritualism and if he does continue it, it can be handled by such devices as the mother closing her eyes and saying she won't look until the child is under the covers. At 2½, the mother had to remove her whole person and shut the door. Now she has only to remove her seeing self by closing her eyes. As

at 2½, the child will often go to sleep faster for another person than for his mother.

The 3 year old does not usually mind being picked up for toileting at 10 to 12 P.M., though the majority of 3 year olds do not need to be picked up. Wakefulness is, however, common at three years and this is often the time when a night life begins. One type of child gets out of his crib easily by himself, goes to the bathroom, goes downstairs, gets some food from the ice-box, "reads" a magazine after turning on the light in the living room, and may be found asleep on the couch next morning. Another type of child talks to himself for an hour or two in bed; and still a third type insists upon getting into his mother's bed.

This is the age when dreams begin to be reported. Though they may wake the child he is rarely able to tell them.

Morning waking is more difficult than going to sleep. As with $2\frac{1}{2}$, the time of waking varies between 6 and 8 A.M. The child is often tired on awakening, sucks his thumb, whines, and in general has a difficult time in starting the day. He is more apt to call to be taken up than to get up by himself. If he is allowed to come into his parents' bed (when it is time) to romp and play, he starts his day more gaily and more easily.

[Some children wake early in the evening while their parents are out, and cry until they vomit or until the parents return. Some children may be able to accept being told ahead of time that their parents are going out. It may be sufficient for the child to be told just as his parents are leaving the house, or he may need to be warned even a day or two in advance. If such warnings are not adequate and the child continues to cry, the parent may have to stay at home evenings until the child can adjust at a later age.]

If the child gets up and wanders around the house during the night without calling anyone, tying his door loosely may necessitate his calling. Many need to be toiletied and need to be given food.

If the child insists upon getting into bed with his mother it may be wise to accede to his demand, but to warn him ahead of time that after he has fallen asleep he will be put back in his crib. If he wakes and cries when returned to his crib, the mother may have to allow him to sleep with her. This type of demand is often self-limited to a week's duration. If, however, it continues, the child may respond better to having his father take the mother's role in the situation.]

Nap

This is the onset of the "play nap." Even the naming of this time when the child is resting in his room a "play nap" often seems to make it more acceptable. There may be a period of two to three months from 30 to 36 months of age when the child does not sleep. He often returns to a real nap at 36 months but this is not constant. If the child of this age does go to sleep he usually falls asleep more quickly than at 30 months. The length of the nap is cut down to one or two hours and waking, though slow, does not involve the conflict that it often does at 30 months.

EATING

Appetite—The fluctuations of 30 months are now settling down to a fair appetite. Breakfast and supper are now more frequently the best meals, though there are many variations. The milk intake is definitely on the rise.

Refusals and Preferences—These are less marked than they were at 24 to 30 months. Meat, fruit, and milk are now on the preferred list. Desserts and sweets are more desired, but cannot yet be used as a goal toward which to work (48 months). Vegetables are now slowly being accepted. The child often wants foods that require more chewing, such as raw vegetables, potato skins, or meat on a bone.

Spoon Feeding—The spoon is now grasped more between thumb and index. Some girls hold it adult fashion with the palm turned inward. Boys, however, are more likely to direct the palm downward. The filling of the spoon is easily accomplished both by pushing the point of the spoon into the food and by rotating it inwardly. The bowl of the spoon may be inserted sidewise or by its point.

There is good rotation at the wrist and little if any spilling results. A fork is often demanded, especially to pierce pieces of meat.

Cup Drinking—The cup is now held by the handle in adult fashion. The free hand is no longer needed to help. The head again tilts back to secure the last drop. This function will later be taken over by the hands alone.

Self Help—Although the 3 year old child is eating well alone, he may not eat well at the family table. The situation is usually too complex. He is apt to demand everyone's attention and wants to have everything in sight. Because of his dawdling he is either coaxed, fed, or left at the table to finish alone after the rest of the family has left.

He is now beginning to ask for special foods he likes during the preparation of his meals.

ELIMINATION

Bowel—The number of movements varies from one to two a day with only an occasional skipping of a day. If there is only one movement, it most frequently occurs after lunch and if there are two the other more frequently occurs after breakfast. Very few have a bowel movement associated with their nap at this age. Many go to the toilet by themselves with or without telling, but still want help when they have finished.

Bladder—Most children go at routine times, with a fairly long span and no accidents during the day. If an occasional accident does occur, they insist upon having their pants changed at once. The most common asking is expressed in general terms such as, "I'm going to the bathroom."

The majority of children are consistently dry after their naps and also in the morn-

ing without being taken up during the night. A number of children are still dependent upon being picked up at 10 o'clock and a few wet once or twice a week, or are alternately dry or wet for a few weeks at a time.

BATH AND DRESSING

Bath—Many of the 30 month bath patterns linger on, though bath rituals are less complicated and more subject to change. Children are now more insistent upon helping to wash themselves at least in part. Getting out of the tub is still resisted, but surprising the mother by getting out while she closes her eyes, usually works.

Dressing—Dressing at this age is likely to go more smoothly than at 30 months as the child is more interested in doing what he can to help and is therefore less likely to run away. Undressing is still carried out with greater interest and ability than dressing. Most children of this age undress well and rather rapidly. Undressing is further facilitated by a new ability to unbutton front and side buttons.

Dressing includes putting on pants, socks and shoes and sometimes sweaters or dresses. However they cannot consistently distinguish the back from the front or button buttons, and though they may try to lace their shoes it is usually done incorrectly. Self-help in dressing is also dependent upon their mood, for they do well one day and poorly the next.

SELF-ACTIVITY

The planning for the child's activity is now much more relaxed. Techniques can now be used with less rigidity and often the handling of a 3 year old is so simple and natural that no conscious techniques are needed. As with the younger ages, the

mornings when the child is not at nursery school are best handled by play alone either in the child's room or in a closed-in yard. He happily accepts these places arranged for his own use as long as he does not have to stay in them too long. But he usually plays so happily and well that it is now the mother who may interrupt the play to suggest that he move on to the next activity. The child makes his own self-demand here and need only be helped more specifically with warnings in advance when it is time for the routines of toileting and eating.

A whole new imaginative world is opening up for the 3 year old. He now may have the addition of a fire-engine, larger building blocks, a new puzzle, and if he is capable of handling crayons alone without scribbling on the wall, he may have a coloring book and crayons. This is the age when sex differences in choice of play materials are becoming more marked than earlier.

It is interesting to see a 3 year old's room after he has had an hour's play alone. It has none of the chaos of the 2½ year old child's room. There are remnants of his play activity, and he may have stories to tell about what he has done. He likes to linger on and even helps to put his toys away though he has no initiative for this and only does it from a sense of comradeship with the adult, and only on suggestion.

After toileting and maybe a mid-morning snack he is happy to be out of doors. His tricycle, which may be his latest acquisition, is often his chief interest. He usually knows how to ride it, but if he does not he likes just to push it around. Another addition to his play yard may be a gym with ladders, a swing, and trapeze rings. He can play endlessly on these and may

find it hard to leave when it is time for lunch.

SOCIALITY

The 3 year old has fewer definite ideas about how the household should be run than does the 30 month old child. He is now more ready to accept suggestions, and may be of considerable help to his mother in wiping dishes, putting things away, and in running simple errands. He is an easier child about the house now that he no longer meddles excessively with things he should not touch.

He enjoys his afternoon excursions out of doors and often prefers to go on his tricycle. If a destination has been planned, he holds a definite idea of it in his mind, but he makes few spontaneous demands to visit his friends.

He is happy when the planned excursion is to another child's home. He actually prefers the afternoon companionship of other children, but cannot quite make his wants known unless it is usual for him to see a certain child quite often. Two 3 year olds play best out of doors with gross motor equipment and may play alone well for twenty to thirty minutes. After this, they usually need supervision and guidance. (For a discussion of this supervision and guidance see §5 of this chapter.) If the 3 year old is not supervised, he is apt to withdraw from his companion or to attack him with biting, scratching, pushing or kicking.

If he has difficulty in adjusting to children of his own age even with supervision, it is best to handle him alone and to plan short excursions to see things and places, or to arrange his play with a 5 or 6 year old who will demand a reasonable amount of fair play from the 3 year old but will

give in to his immature wishes when he cannot be handled otherwise.

As discussed under 30 months behavior, there is one type of child who plays best at home and shares poorly, and another type who plays best away from home and shares generously. The former is the child who does best with an older child.

The mother is more commonly the favored parent. The child enjoys speaking of himself and his mother together as "we." He has just come through a new emotional awareness of himself. From 30 to 36 months he has progressed past the feeling of "I" and its needs, and "you" with its demands from the other person. "I" and "you" are their own counterparts, for he sometimes demands to do what he cannot do and asks help from the parent with things he can do.

With growth and reorganization he partially loses this sense of "I" and "you" and somehow sinks back into babyhood. Emotionally he relives his whole life, with help from his mother. With fatigue he asks to be carried and wants to be a baby. He actually may say, "I'm a little baby. I can't talk, I have no teeth, and I have no hair." If he takes himself literally he may actually pull out hair. But if he holds more closely to his present reality, as is more usual, he may say, "I'm a little baby. I have to have a bottle. I sleep out in the carriage, *but* I can talk."

The wise mother helps the child to relive his babyhood. She answers all of his questions and tells him about himself. He wants to know about what he wore and how he cried, how he talked and laughed, where he slept, how he was fed. He even likes to hear about the fears he has conquered. He especially likes these stories after he is put to bed and may enjoy hearing them over and over.

But finally toward three, he is a little

older and has relived step by step much of his past life until he has reached his present age. Then he is ready to go forth from the parent, to look forward rather than backward, to think of himself in his relation to the future, whether the future is tomorrow, the next school day or the next holiday. Some cling to this reliving of their past lives and especially their babyhood even into the fifth year.

[The child may be ready at this age to choose between two alternatives and may enjoy making simple choices, i.e. when he is slow to come in for lunch he may be asked, "Do you want to come in the front door or the back door?" Or, if he is slow in dressing, he may be asked, "Do you want to wear your blue overalls or your green ones?"]

Those who cannot take choices need to have planning ahead of time. "We're going to buy the chocolate cookies at the store." If this type of child is allowed his own choice, he will be sure to shift his choice halfway home and have a temper tantrum because he does not have his way.

Do not divide authority about any specific situation between the mother and the father. The child should know that his mother decides about clothes, candy, etc.; his father, about the repair of toys, excursions to the railroad station, etc. Particularly do not allow the child to play one parent against the other.]

The imaginative life of the child rises slowly until it reaches a high peak at 3½ years, in the form of an imaginary companion. At 4 years this transforms into more dramatic social play involving two or more children. Even during the second year of life the child may pretend to pick something off the wall and give it to the adult. By two he may pretend to pick food out of a magazine. By two and a half, he

is conducting a very creditable tea party even without the real aid of water. The realist, however, insists upon having water in his tea pot and cannot imagine having a tea party without "tea."

The interest in imaginative playmates has its beginning at about 2½ years of age. At the same time, he makes shifts in his identity; he becomes an animal. All this is coincident with the self-discovery of his own identity. These imaginative constructions are tentative at first, but become more defined and strong by 3 and especially by 3½ years of age. There are wide individual differences. Some children do not indulge in this imaginary life. The stimulus comes quite spontaneously from within the child. One 3 year old girl who longed for playmates saw little girls looking through her window. Some children cling to a friend who has gone away by holding on to him as an imaginary companion.

Probably all imaginative life in the child satisfies some inner need, whether it is for companionship, someone to "beat," someone to look up to, someone to do things with, someone to do things for or someone to boss. Probably the intricacies of individual emotional development are being worked out by the child through these imaginative devices.

By 3½ years the child's imaginary life often has more definite pattern, is bound up more intimately with his own activities. The imaginary companion may need a

place at the table, he may sleep in or under the child's bed, he may go for a ride in the car. The child is often very demanding about the rights of his imaginary companion and very solicitous in teaching him many things.

He most often relates this companion to his own home life. It is only rarely that the companion is brought to nursery school, though he may be brought as far as the schoolroom door. If he is brought into the room, this may well be an indication of a difficult adjustment which the child is handling through these imaginative means. The same is true of the child who takes on the role of an animal. This role is much stronger at home, and exercises such complete domination that the hand becomes a paw, the speech turns into animal noises, and the tongue becomes a lapping instrument when it is time to drink milk. This imaginative shift of personality is more likely to be carried into the nursery school than is the imaginary companion.

Any of these imaginative outlets should be respected by the parent, and even utilized, but not exploited. With a fuller experience and a growing ability to adjust to the social structure, the child shifts his imaginary impersonations into his group play by becoming the doctor, the fireman, or the mother. But as with other behaviors, there are recurrences of this imaginative life even up to 8 or 9 years of age.

§3. CULTURAL AND CREATIVE ACTIVITIES

Books

1. Increasing span of interest in listening to stories.
2. Can be held longer when stories are read to small groups.

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3. Continued enjoyment of familiar experiences with repetition and more detail as, "Bobbie and Donnie were Twins."
4. Likes information about nature, transportation, etc., woven into story form as "Beachcomber Bobbie" and "Four Airplanes."
5. Likes imaginative stories based on real people and real animals, as "Caps for Sale," and "Little Black Sambo."
6. Enjoyment of riddles and guessing, such as "The Noisy Book."
7. Enjoys widening of horizon through information books as, "Sails, Wheels and Wings."
8. Makes relevant comments during stories, especially about materials or experiences at home.
9. Some insist on stories being re-told and re-read word for word without changes.
10. Likes to look at books and may "read" to others or explain pictures.

MUSIC

1. Many can reproduce whole songs, though generally not on pitch.
2. Beginning to match simple tones.
3. Less inhibition in joining group singing.
4. Can recognize several melodies.
5. Experimenting with musical instruments.
6. Simple explanations concerning songs and instruments delight them and encourage interest.
7. Marked individual differences in interest and ability to listen to music.
8. Enjoy a diversity of musical experiences.
9. Most members of the group participate in a variety of rhythms.
10. Watchers will often participate when approached through another child, or through dramatizing.
11. Children gallop, jump, walk and run in fairly good time to music.
12. Enjoy dressing up in costumes for rhythms.

PAINTING

1. Strokes are more varied and rhythmical.
2. Beginnings of design are emerging.
3. Often child covers whole page with one color, or with blocks of various colors.
4. Sometimes names finished product, but seldom any recognizable resemblance.

CULTURAL AND CREATIVE ACTIVITIES

5. May be stimulated by watching an older, talented child paint, or by observing more advanced paintings of other children.
6. Joy and pride in product; exclaims, "Look what I made!"
7. Works with more concentration and precision.
8. Dislikes to share paper with others.

FINGER PAINTING

1. Experimenting with finger movements as well as whole hand movements.
2. Some feeling for design.

CRAYONS

1. Demands a variety of colors.
2. Enters representative stage earlier with crayons than with paint.

CLAY

1. Enjoyment of manipulating with hands, patting, making holes with fingers and squeezing.
2. Beginning of form: making flat, round "cakes," and balls. Rolls long, narrow strips, etc.
3. Some naming of product with general approximation in shape.
4. Makes products for others outside of school, especially mother, but often forgets to take them home.

SAND

1. Makes cakes, pies, roads, tunnels, etc.
2. Combines with other materials, such as pegs, stones, shells, cars.

BLOCKS

1. Likes a diversity of shapes and sizes.
2. Order and balance in building.
3. Combining with cars, trains, etc.
4. Often names what he is making.
5. Enjoys the process of construction more than playing with finished product.

POSSESSIONS

1. Enjoys new clothes and likes to exhibit them to others, especially to teacher.
2. Beginning to share toys; less hoarding.

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3. Brings possessions to school to share with others, books for instance.
4. May enjoy exhibiting possessions then forgets about them for the morning.
Generally brings different things every day.
5. Dislikes having others wear his clothes.
6. Likes to have pennies to put in the bank. Knows that money is used in making purchases but has no idea of how much. Play money may be very satisfactory as a substitute.

HOLIDAYS AND FESTIVALS

1. Birthday—The moment the cake arrives, the child is three. He enjoys a small party of two or three friends. Best time for this is still mealtime.
2. Christmas—Interest in Santa Claus. Much interested in his own presents. Cannot keep secret the presents he is giving others.
3. Valentine's Day—Likes sending valentines to others and making a personal mark (as a scribble or the first letter of his name) on the back. Often brings valentines to school to show to other children.
4. Easter—Interest in Easter bunny and eggs.
5. Hallowe'en—Delighted with Jack O'Lantern, which is the whole meaning of Hallowe'en to him. Likes watching adult make Jack O'Lantern and gives some help.
6. Thanksgiving—The whole meaning of Thanksgiving is the turkey, which he knows about beforehand. However he also enjoys the party aspect of this holiday including guests or a trip to visit relatives.
7. Religion—Greater interest in going to Sunday School. Also enjoys the quietness of church. May enjoy saying short prayers.

EXCURSIONS

1. Enjoys excursions to airport, railroad station, fire station, harbor, zoo or farm.
2. Fascinated watching men at work, as carpenter, painter, mechanic. Likes to watch steam-shovel, cement-mixer, in operation.
3. Interested in planning visits, as an afternoon with another child or lunch with grandmother.
4. Enjoys everyday excursions as going to market.
5. Definitely has thought of destination in mind and enjoys talking about it beforehand.

§4. NURSERY BEHAVIOR

THE THREE YEAR OLD is becoming a man of the world. He displays a certain abandon and also some *savoir faire* when he makes his entrance to the nursery. If he is exuberant he may shout and sing as he comes along. He is likely to be sociable and communicative if he meets a familiar adult on the way. He may begin to tell some interesting story before he even enters the cloak room and he is very likely to continue his story because of the fullness of his utterance.

He readily sheds his dependence on his mother. While he is reciting his tale she may have to remind him that it is time to say "goodbye," and she must be content with a somewhat perfunctory leave-taking. He is not mature enough to do two complicated things at one time. Although he can remove his outdoor garments without much assistance, he stops midway in the process when he begins to talk. His talk is usually directed to the guidance teacher. His companions are equally eager to impart some story to her. As a result there will be several children talking at the same time, not too concerned whether every word is listened to.

The desire to talk is so eager and the guidance teacher herself is so interested that the preliminary period in the cloak room becomes a kind of social prologue to the morning in the nursery. All this is quite different from the inertias and dawdling so characteristic of younger age groups. The atmosphere reflects the advancing maturity of the THREE YEAR OLD and his strong tendency to establish social contacts, particularly with adults. With adult cooperation the conversation can be continued indefinitely. Three's conversational approaches to children of his own age are briefer and are more touch and go. It is as though he recognized the cultural significance of the adult in a new way. The mere presence of the guidance teacher influences the flow of his behavior. At 'juice time' and 'story time' he will again project his narrations upon her. More frequently they are stories of the interesting things which happened at home.

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He is weighted with home experiences even when he has crossed the threshold of the nursery.

He enters the nursery room with some deliberativeness. When he was a year younger he tended to run forthwith toward some particular toy. Now he may survey the scene for a moment and when there are other children in the room he will choose a child or an activity which engages his interest. There is an element of choice in what he does. There is an element of sociality in his approach. After a brief greeting or interchange with one of his playmates he may engage for a while in independent play. The following stenographic account with its time record illustrates the range, diversity and sequences of his behavior. The several children are alphabetically designated.

9:35 R and S are building with large blocks. They build slowly and watch the other children riding in portable house. S says, "Building a house. Look at this house: one-two-three (blocks)." Long pauses occur as they watch others. R leaves and S keeps on building alone. "I think I will do this. This is mine, mine, mine. Who, who, who? This is mine." Watches R climbing ladder.

9:41 S has walked to the middle of the room and after standing for some time watching the other children she climbs on the "train" beside J. Says, "Bee" to J and he says "Bee" to her. She says "You"; and he replies, "You." She sits on the train. The teacher puts up a gangplank and J says, "You take that thing down." Three of the children take turns walking up the gangplank. S says, "I wanna try that."

9:44 S climbs up the gangplank. Four children are now standing on the train. The teacher says, "Here comes the engineer." R replies "Here's a passenger. Here's a passenger." Smiles at her own remark. R and S stand quietly and the others walk up and down the gangplank.

9:45 J, the engineer, "starts" the train which now contains three children and the teacher.

9:47 On suggestion, P collects tickets and then goes around selling sandwiches.

9:48 S wants to drive. J pushes her away and slaps her. She squeals. The others watch neutrally. S leaves and J again drives. The passengers watch.

Passengers pretend to share a "chocolate bar" block with the teacher. Sandwich seller brings around more refreshments.

9:50 Teacher suggests that children be baggage men and put the baggage (building blocks which are scattered around) in the baggage house. All cooperate. Children are asked how many trunks they can carry. S says, "I can carry just one." J says, "I can carry four." R says, "I can carry two." S and R stay with this putting away longer than do the other three who go over to the portable house. R says, "Dese go here." S says, "Yes, yes. An' here's some more. Here's some. I think I can carry all of these. See how I can carry theses!" R, "We're all tidy." S, "There's no room for these now."

The foregoing is a random sample of group behavior at the THREE YEAR OLD level. It will be noted that although the THREE YEAR OLD is capable of initiatives, he is almost more susceptible to social suggestion. His behavior tends to elaborate as soon as the teacher supplies a prompting. Promptings would have been without effect at a younger age; but the THREE YEAR OLD almost demands them. And so the teacher becomes a kind of catalytic agent or energizer. She simply gives cues. It is not her task to get the child to do something which she thinks should be educationally imposed upon him.

For similar reasons the THREE YEAR OLD is now responsive to verbal suggestions. Toward mid-morning the teacher says, "It is time to wash"; "You could go with M—." The ablutions are executed with moderate efficiency. The THREE YEAR OLD may have to be reminded to turn off the faucet, but he does not go out of bounds as he will at three-and-a-half, when he will wash the mirror as well as himself.

He returns to the nursery room and helps the teacher with the setting of the table for the mid-morning lunch. R may remark, "I want some juice." S declares, "I want some crackers." The conversation is at a simple level, but it elaborates at once as soon as the teacher drops a catalytic remark. She says, "It will soon be spring." Immediately R, S, and J chime in as follows:

R: "I know, mummy told me." J: "We wear spring coats." R: "Did you

know it rained last night? I didn't get wet because I had a rain and snow-suit on." S: "I had a umbrella." R, pouring juice: "Up to the bump." S chimes in "Up to the pump." R: "Bump, not pump."

Each child puts his glass on the tray as he finishes and then in obedience to routine makes directly for the relaxation cots. He offers no resistance: he likes to relax with the aid of music or of a quiet story read by the teacher. He keeps his eyes open but remains moderately quiescent for a period of about ten minutes. Then on verbal suggestion he returns to the cloak room to be dressed for outdoors.

By this time the level of his integration has somewhat subsided. Moreover, it is more difficult to dress than to undress, and so he needs the help of the teacher at critical points. His speech and inflections have less pattern and control than they had earlier in the morning. He welcomes the transition to the out of doors. Outdoor play has a beneficial effect on his mood and movements. He favors the use of his grosser motor muscles. He rides the tricycle; he climbs; he digs; he slides. At the same time he dramatizes himself as a fireman, an engineer, or a roadman, without carrying out any elaborate dramatic sequence. Two or three children, however, are likely to congregate and engage in some type of activity.

After about an hour of outdoor play the THREE YEAR OLD is ready to welcome his mother. But he wants one more turn before he goes. He also likes to demonstrate some athletic feat in which he has both a personal and social pride. If the pride were not social as well as personal he would not make this reference to his mother. He is very much in character when he does so, for he likes to please. He himself is pleased when he pleases others.

§5. NURSERY TECHNIQUES

PHYSICAL ENVIRONMENT

Fewer environmental restrictions are necessary. Since the gross motor drive is reduced, children can hold more to spheres of interest in various sections of the room. They can also be helped to hold to these spheres of interest longer through

verbal suggestions from the adult, i.e. "Is your supper ready?" when playing in the doll corner; or "Does anybody need any groceries?" when playing in the store.

More materials for dramatic play, such as a costume box, and more constructive materials, such as large blocks, are important at this age.

ADJUSTMENT

Adjustment difficulties are rare at this age, and when they occur can be handled through familiar "surprises" or through favorite toys.

ROUTINES

Children at this age move easily through such routines as washing, toileting, mid-morning lunch and rest. They can handle undressing almost entirely by themselves but need some help in dressing, mostly in starting their ski-pants and jackets. (More help is usually needed at home than at school.) Dressing and undressing can both be speeded up through humor.

Very few refuse to rest on cots at this age, but they will not rest for more than ten to fifteen minutes. Relaxation can best be accomplished when music or stories are used.

Children do not put toys away spontaneously, but enjoy doing so in a group if putting away is dramatized and they can pretend that they are lumbermen, movers, or some other specific persons. The whole group often work together in the spirit of a game.

TRANSITIONS

Transitions are seldom difficult at this age. New ways of doing things, of going from one place to another, can be used. Since the gross motor drive is now more under the child's control the suggestion to run, jump, or hop into the bathroom or elsewhere becomes a new game.

TEACHER

This is a social, imitative, "Me, too" age. Therefore it is better to point out positive rather than negative factors (referred to more safely before three), as children are apt to do the thing mentioned. "We stand on the floor" gives them the positive suggestion rather than, "We don't stand on the table."

One has to decide at three years when the child's behavior is deteriorating whether to handle a situation at a younger level or at a higher level. For instance when a child runs away from putting on his outdoor clothes at the end of the morning the adult may need to dress him in the bathroom with the door closed (30 months

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behavior), or to interest him in some new information about animals or the next holiday (48 months behavior).

If a 3 year old is in constant conflict and is lowering the behavior of the group, he may become smoother after visiting a younger group where solitary play predominates. A dynamic, aggressive 3 year old who takes over the direction of his group completely may by visiting a 4 year old group acquire more subtle techniques and at the same time give his group a rest.

One of the most effective measures to use as a last resort is isolation. Because of the increased sociability of the child, he is strongly affected by removal from the group plus the explanation that, "You bother the other children," or "You are too tired to play with them." Isolation should not last very long and should be accompanied by an adult or by toys. If a group situation occurs which the child particularly enjoys, the adult can point out, "It's too bad you missed the fire engine story today because you bit Sally." Also project into the future, "Next time you will remember that we don't bite *any more*." The next day during the story situation the adult may remark, "It's nice to have Bill hear the story today, *too*." If a child repeats some unacceptable behavior, the phrase, "You forgot," or "You made a mistake" may terminate the behavior.

VERBAL

The 2½ year old child's demand for repetition of the same words and phrases is now giving way to an interest in many new words and new uses of words.

- a) Key adjectives—"new," "different," "big," "strong." "Could you make a *different* kind?" stimulates the child within a situation without giving him a specific idea. "Can you carry two *big* ones?" may be the needed challenge to put the blocks away.
- b) Key nouns—"surprise," "secret." "When you finish going to the bathroom I have a *surprise* for you" may organize a scraggly group.
- c) Key verbs—"help," "might," "could," "guess what." "You *could* help John fill the cart" may not only produce the desired action but also the satisfaction as expressed in "I'm helping."
- d) Key adverbs—"Maybe," "How about," "too." "You could help, *too*" helps the child to join in group activity which he craves. By 3½ the group rings with the spontaneous remark, "Me, too."

The 3 year old listens well when he is reasoned with. He will sometimes do things he does not like to do if he is given a good reason, e.g. "Let's pick up the blocks so we'll have more room to dance." A good reason for doing something should include a specific step by step suggestion. Children withdraw from general demands such as "Pick up your room" or "Tell me what you did at school today." They respond

readily, however, to "First let's pick up the big blocks and then . . ." or "Did you paint at school today?"

The use of "maybe," "you might," "perhaps," "you could" gives the child a graceful way of refusing in situations where complying is not important, e.g., "Maybe you could help Bobby pull the wagon."

One of the best ways to simplify a group pressure situation is by whispering to the child. The same question such as, "Where does your cup go?" may not be responded to when spoken out loud, but may be immediately responded to when spoken in a whisper. The whispering not only gives the enjoyment of a secret, but also restricts the child's influence to only one other person.

HUMOR

The gross motor humor of the 2 year old is steadily giving way to verbal humor by three. Simple repetitions as "golly, golly, golly" tossed back and forth between the child and the adult like a verbal ball give a joyous air to activity.

Humorous wrong guesses from the adult delight the child. E.g., as the child is taking off his outer things the adult may ask, "Are your socks purple today?" "No," says the child with a smile.

Adult: "Then they are red?" "No" laughs the child.

Adult: "Then they must be blue." "No, wrong again" laughs the child as he hurries to take off his suit to show the teacher that they are white.

OTHER CHILDREN

With language equipment and a better developed sense of the other person as expressed in his use of "we," the 3 year old can solve his own problems more adequately, and needs less adult guidance than does the 2½ year old. It is sometimes advisable to let children settle their own disputes by fighting it out if they are fairly evenly matched and the aggressive child does not always win. The adult should sense the point beyond which her "ignoring" the conflict would be detrimental to the children involved.

The 3 year old is apt to respond more to the other children than to the adult as he did at two. Therefore the adult may often use a child to help another. "John, you may go in to rest with Bobby." Group squabbles are often best settled by the leader, as when a boy and girl in a group of three were fighting over an armchair. The teacher's stock techniques of, "Who had it first?" or "You could take turns" made no impression upon them. Then the teacher turned to the third child who was the "hostess" and asked her what she was going to do about it. Whereupon she

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replied immediately, "Only daddies sit in chairs with arms. You sit over there, Nancy." And Nancy complied at once.

The 2 year old's use of substitutions in a dispute can still be used at three. However the 3 year old can wait better, can understand that "Bill is using it now" and may often take the cue from the teacher. "Ask Bill when he is going to be through with it." Bill may answer, "In two minutes" which may mean almost at once.

Since 3 year olds are much more social than formerly, other children can be used successfully to take charge of a difficult child or to help make new adjustments. A 7 or 8 year old child visiting for a day may raise the level of behavior considerably and have a carry-over for some length of time.

42 months: If you treat the annoying commands of $3\frac{1}{2}$ lightly they will often run their course more quickly. The frequent frustrating refrain of "You can't come in" with which children exclude others from their activities may be treated as follows:

- a) With a light tone of the positive, "She can come in" sung on a minor third.
- b) With a choice, as "Do you want her to bring you some bread or some butter?"
- c) With a widening of their horizon by a new word or new concept, as "You could invite her to be your *guest*," or "Show her where she can ring the doorbell before she comes in."
- d) With use of the specific, "But this is the postman bringing you some mail."

GROUP ACTIVITY

Three is capable of continuing group play more smoothly and longer than two-and-a-half, and there is more spontaneous group play. The teacher can often keep play from deteriorating by elaborating it with suggestions such as, "Is supper ready?" or "Who's going to be the conductor on your train?"

Rising tension at this age may be relieved, as at $2\frac{1}{2}$, by the adult's setting up parallel group play with clay, etc., which satisfies the "Me, too" characteristic of the 3 year old.

There should be a balance or alternation of quiet and active group play.

The group may need to be subdivided to separate conflicting personalities. This will help to prolong and support group play.

42 months: A group of 3 year old children will generally be calm and quite self-reliant in comparison with the stormy $2\frac{1}{2}$ year old group. However, by the time they reach $3\frac{1}{2}$ they begin forming strong friendships and discriminating against the rest of the group, demanding and commanding each other and resorting to hitting and pushing. This is related to their increased tension, which makes them stumble, fall and become over-excited. As at $2\frac{1}{2}$, their group behavior is quite

unpredictable, some days being very stormy and others showing remarkable glimmers of 4 year old cooperation and imagination.

During a difficult period a group of $3\frac{1}{2}$ year olds is frequently better organized if they start the morning with some planned activity such as scrubbing woodwork, blowing soap bubbles, etc., rather than free play.

A Footnote concerning three and a half year old maturity.

Readers of this volume scarcely need to be told that the contrasts which we draw between adjacent ages do not actually appear with sharp suddenness in the growth of the child. He is always in a state of transition. The stretch between three years and four years is a long one; and it is not surprising that there should be some unevenness along the way. This is the reason our text makes frequent reference to the $3\frac{1}{2}$ year old. For a brief period he may be in a stage of developmental awkwardness, manifested in a tendency to stumble or fall, in increased tensional outlets (like nail biting, eye blinking, or tremulous hands), in fear of heights, in a shift of handedness, in temporary stuttering, in repeated seeking of assurance: "Do you love me?" Generally such "dis-equilibrium" traits are not severe or prolonged; and show a tendency toward resolution as the child grows older.

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FOUR YEARS OLD



§1. BEHAVIOR PROFILE

THREE has a conforming mind. FOUR has a lively mind. THREE is assentive; FOUR, assertive. Indeed, FOUR tends to go out of bounds both with muscles and mind. And why should he not? If he remained a delightful, docile THREE, he would not grow up. So he surges ahead with bursts of movement and of imagination. His activity curve again takes on the hither and thither pattern typical of TWO YEARS. But this is not a regression; for he functions at a higher level in all departments of his behavior; motor, adaptive, language, and personal-social. He covers more ground, not only in his running, hopping, jumping, skipping, climbing; but in the lively constructions and antics of his mental imagery.

If at times he seems somewhat voluble, dogmatic, boastful and bossy, it is because he is a blithe amateur swinging into fresh fields of self expression. For a while he scarcely can be too concerned about the feelings of

others. He is not quite as sensitive to praise as he was at THREE and as he will be again at FIVE. Instead he praises himself through bragging. Besides he is much less experienced than his brave verbal assertiveness might suggest. He has meager appreciation of disappointment and the personal emotions of others. He is inquisitively interested in death, but has scant comprehension of its meaning. He is plausible because his words often outrun his knowledge.

His motor drive is high. He races up and down stairs; he dashes on his velocipede. He trapezes on the jungle gym, with flying commentary while he performs: "I bet you can't do this, I hope!" He can also combine talking and eating. At an earlier age he either talked or ate; now he does both more or less simultaneously. This is a new ability (THREE had to stop undressing when he was speaking).

FOUR's motor equipment including his voice is under finer control. He can throw overhand; he can cut on the line with scissors; saw with a hand saw; lace his shoes; stand on one foot. Although he enjoys gross bodily activity, he is able to sit for a long period at interesting manual tasks. Hands, arms, legs, and feet are becoming emancipated from total postural set. If his general postural development has been fortunate to date, his dancing and his hand movements now assume a natural, untutored gracefulness.

FOUR is a great talker. He is his own self-appointed commentator and often his own audience. He likes to use words, to try them out, to play with them. He likes new, different words (indeed *different* is itself a favorite word for him). He also likes to perpetrate silly words like, "marty-warty," "batty-watty," and "ooshy-wooshy" to describe the soft clay. Questioning comes to a peak. The endless "Why" and "How" questions are not for pure pursuit of knowledge, but are devices for practicing both speech and listening. Therefore, a bright, articulate FOUR YEAR OLD tends to run his topics to the ground, exhausting every verbal possibility. Just as he tries to climb high on the gym, so he climbs high with his vocabulary and grammar. Naturally his syntax often topples.

The key to FOUR's psychology is his high drive combined with a fluid

mental organization. His imagery is almost mercurial. It moves from one form to another with careless ease. He starts to draw a turtle, before he is through it is an elephant or a truck. This same fluidity makes him a fabricator and a fertile producer of alibis. It also makes it possible for him to dramatize any experience which comes within his ken. A hospital bed scene is readily reenacted with very simple materials serving as properties. A block becomes a bottle of medicine; and in another instant a stethoscope. Such dramatic play with ever running comments and dialogue is a staple form of nursery behavior.

FOUR is voluble, because his imagery is mercurial; and also because he wishes to express his experiences in more flexible and more mature phraseology. He cannot be content with the simple seriated sentences of the THREE YEAR OLD; he wants command of conjunctions, adverbs and expletives. So he uses them with creditable (and incidentally amusing) bravery:—*You see, You know what, I guess, maybe, really, not even, enormous, only, suppose that, still, now see, and everything.* He is adept at picking up phrases from his linguistic culture, such as "You'll never guess in a hundred years." His use of numbers is experimental rather than critical: "There were 77 people there." He "exaggerates" because he is practicing words. But sometimes (parents beware) he reports quite faithfully what happened at home, not sparing family disagreements:—"Mother is careless with money."

Really (!), the FOUR YEAR OLD is very versatile. What can he not do? He can be quiet, noisy, calm, assertive, cozy, imperious, suggestible, independent, social, athletic, artistic, literal, fanciful, cooperative, indifferent, inquisitive, forthright, prolix, humorous, dogmatic, silly, competitive.

He is in a "growthsome" stage, particularly with respect to interpersonal relations and social communication. This is a period of acquisition, of rapid acculturation. At THREE YEARS the child had consolidated earlier gains and was in relatively stable focus; at FOUR he is moving on to another consolidation; for he comes into focus again at FIVE YEARS. It is not strange, therefore, that the FOUR YEAR OLD tends to go out of

bounds, notably in the field of speech; but fundamentally he is striving (through his growth impulses) to identify himself with his culture, and to comprehend its intricacies. He is more firmly based than appears on the surface.

Sometimes almost consciously he is trying to grow up. He is interested in becoming FIVE YEARS OLD; he talks about it. He does not, of course, have a concrete comprehension of a year as a unit of time; he is only beginning to understand that Wednesday comes after Tuesday. But he is unmistakably interested in the march of birthdays. Birthday parties are a favorite topic of conversation. To be invited by a FOUR YEAR OLD even months in advance, is a sign of social approval; to be expressly excluded denotes at least temporary disapprobation. Fragments and hints of tribal sociology appear in the group life of the FOUR YEAR OLDS when they foregather in the nursery. They organize themselves into groups of three or four; often with segregation of boys and girls. Commands are given, taboos set up. Lines are drawn sharply and intruders barred. This negative behavior, from a developmental standpoint has a decidedly positive significance. The in-group feeling is a step toward understanding the nature of a social group. There is no old man of the tribe. Mommy is the court of last resort and her authority is frequently cited:—"My Mommy told me to do that."

Social patterns are offset and in part defined by anti-social conduct. The FOUR YEAR OLD takes to calling people names: "You're a rat," "Naughty Lady." He becomes defiant: "I'm mad!" "I'll sock you!" Refusals previously expressed by "No!" are now stated with a vigorous "I won't!" His boastfulness reaches towering ego-centric heights. But all this bravado is not as drastic as appears on the surface. Four is feeling his powers and is trying them out. His inconsistencies are similar to the contrarinesses which he displayed as a younger child. Contrary extremes meet in the paradoxical logic of development. The cultural restraints of home and nursery help to keep the extremes within normal bounds.

Basically, the FOUR YEAR OLD is more interested in socialization than in resistance. He shows this in his great fondness for dressing up

and acting like grown-ups. That is one more efficacious method of maturing. He does not only don an adult hat; but he indulges in long telephone conversations, which echo the exact inflections of the adult voice. The incessant *WHY?* is directed toward social as well as natural phenomena. The FOUR YEAR OLD takes a significant pleasure in listening to explanations. He also likes to make faces. This is still another method of identification with adults and of perfecting his skill in reading their facial expressions. He is reading into, talking into and acting into the complexities of his culture.

§2. BEHAVIOR DAY

THE FOUR YEAR OLD usually wakes up in a happy mood at about 7 o'clock or a little later. He likes to get up and to go to his parents' bedroom for greeting and conversation. He has lost the romping abandon of a year ago.

With due deference to the household proprieties, he dresses himself while his parents are dressing. He is able to do this without much assistance if his clothes have been laid out for him in advance on the floor or chair. He can complete the dressing with the exception of tying bows and buttoning back buttons.

He can amuse himself if necessary looking at books; back numbers of the *Geographic Magazine* are favorites. He may help set the breakfast table, but he usually takes his breakfast alone. Once or twice a week, the family may make a special occasion by having him join them at breakfast time.

If he is registered at a nursery school, he usually spends five or six mornings a week away from home. He likes to attend regularly but is not unduly worried if he arrives at school somewhat late.

At home, he plays by himself contentedly indoors for an hour or two at a time. He favors a dramatic combining type of play. He is fond of building blocks and imaginatively converts them into multifarious ani-

mate and inanimate objects to suit his dramatic fancies. If he is a boy he likes to play with string, tying the chairs and furniture in intricate but to him meaningful mazes.

After indoor play he enjoys going out into the near neighborhood for a visit or an errand. He responds best if he has occasional supervision at critical points at the beginning and at the termination of an experience. He asks permission to go; he comes back to report. Although he now has a degree of self-reliance, the household does well to keep tabs on him!

He lunches at noon alone or with a younger sibling if he is fortunate enough to have one. His appetite is on the rise. He eats neatly and adeptly, but again he needs an occasional cultural prod and incentive.

He toilets himself after luncheon. His regular bowel movement may come at this time. He attends to himself.

At about 1 o'clock he is ready for a play nap of an hour or two. He relaxes more readily than hitherto, reclines on the bed, looks at books, plays quietly. He may or he may not go to sleep, but he has acquired a rather accurate sense of time. He seems to know when the official nap period is over, and reports to that effect with clock-like regularity.

Even if he has attended nursery school in the morning, he craves company during the afternoon hours from 3 to 5 o'clock. He wishes either to visit at a friend's house or to have a friend come to his house. He generally prefers children of his own maturity with whom he engages in gross motor and dramatic play. Two make good company, three a crowd which releases a tendency to vocal quarrelsomeness.

At about half past five he is ready for supper. He feels proud to have graduated to the kitchen where he eats his supper contentedly alone. He is able to amuse himself until it is time for a session of play with his father. He likes to be read to; he likes to build block structures with his father. He prefers the gramophone to the radio. (For interesting maturity reasons, the radio does not come strongly into the sphere of the child's interest until the age of 5 years.)

The evening bath comes at about 7 o'clock. He may be able to take it

alone with the usual incidental cues, though he still needs a minimum of direction.

Although he is relatively self-sufficient, he may want to take his teddy bear to bed with him for dramatized conversation. He likes to have the light on for a short period, but when his parents return for a good-night greeting, he goes off to sleep without protest.

SLEEP

Night

Going to bed is now relatively easy and by 4½ years of age the child may even ask to go to bed. He enjoys hearing stories before he starts for bed. He knows that the hour of 7 o'clock is time for bed, and he can read that particular time on the clock. He responds better to the fact that the clock says it is time to go to bed than that his mother or father says it is bedtime. He may even respond more promptly if an alarm clock is set to go off at bedtime.

A few children not only need a going to bed time, but also a putting out the light time. Without this extra fifteen to thirty minutes to settle down in their beds with the light on, they may be very demanding. The child likes to look at books or to color at this time. His teddy bear, or a whole family of teddy bears (mother, father and baby), are often his favorite bedtime companions. He wants to undress and dress them and treat them like real persons. He often wants to put them under the covers and puts the covers very carefully under their chins. A goodnight kiss from the parent and a long strong hug means that the child is ready for sleep. He now falls asleep rather quickly.

The 4 year old usually awakens by himself if he needs to be toileted during the night. A few children are able to go to the

bathroom by themselves, but they usually tell the mother first. They may need only verbal help, and the most difficult part of this procedure is usually getting back into bed. Sometimes verbal suggestion is not quite enough and the mother may need to get up and help the child back into bed. By 5 years he is ready to carry through the entire process without the parent's help.

There is much less wakefulness caused by dreaming at four than there was at 3½ years; but by 4½, the child may again have a period of dreaming about animals, especially about wolves. He may be especially sensitive to any light stimuli coming into the room and therefore may need to have his bed in a dark corner. If the child is afraid of the dark, a light on in the hall is often sufficient to allay his fears.

The 4 year old wakes around 7 to 7:50 A.M. He is now able to put on his bathrobe and slippers if they have been laid out for him, to close the window, to go to the bathroom, and to play in his room until it is time to go to his parents' room. When he goes into his parents' room he often likes to be read to or to look at books until it is time to get dressed. He finds it especially easy to make these shifts if there are whistles which blow, or church bells which punctuate these hours.

[Children who wake up at night and have difficulty getting back to sleep may

respond to stories about other children who used to wake up at night but who no longer do so.

The 4 year old is now ready to sleep in a big bed. This change from his crib to a big bed can be helpfully utilized in planning for needed improvements in sleeping patterns.]

Nap

A very small proportion of children nap at this age. They will occasionally take a nap preparatory to staying up late in the evening. This is in marked contrast to the 2 to 3 year old child who if he is told what is going to happen after his nap will become so excited that he will be unable to sleep.

The 4 year old enjoys a play nap from 1 to 3 P.M. He may spend the first half hour or hour on his bed looking at books, and then spend the second hour out of bed. He may no longer need his door tied, goes to the bathroom if necessary, and frankly enjoys this time alone in his room.

Often these hours are very creative ones as long as the child has the proper media to work with. He needs to be alone, to have the pressure of other influences removed, that he may utilize his past stores of knowledge and ability. His inner time clock now seems to be more in tune with the time of the clock on the wall for he senses when it is 3 o'clock and asks if it is time to come out.

EATING

Appetite—The 4 year old appetite is still only fair, but by 4½ it is good to very good, with no special meal leading another. The child drinks his milk well and rapidly.

Refusals and Preferences—There is some tendency to demand repetition. The 4 year old either goes on food jags or food strikes,

which usually drop out by 4½ years, when the appetite is keener.

Self-Help—The 4 year old is beginning to help plan his meal and also to help prepare it. He enjoys helping to set the family table even though he may not come to it for more than two or three breakfasts a week, which is all that many children can handle. A few children, however, show marked improvement in their eating if they come to the family table at this age. Most 4 year olds have difficulty in not letting their talking interfere with their eating; they do not sit well through a meal, and may need to interrupt the meal (especially an evening meal) by going to the bathroom.

When they eat alone they are apt to dawdle but do not usually need to be fed. They often enjoy graduating from their own room to the kitchen at this age. Also such incentives as eating to get big, racing with the baby, finishing within a certain time allotment or working toward a dessert goal, may help. Planning ahead to ring a bell which announces the completion of one course and a desire for the next may be all the incentive the child needs. By 4½ years of age, he is picking up speed, is handling more meals with the family, can listen as well as talk, and is beginning to be sensitive to outside influences, such as those coming over the radio.

ELIMINATION

Bowel—One movement a day, either after breakfast or lunch, is a common 4 year old bowel pattern. Some children have more than one movement, and an irregular time of occurrence. Though some children still tell before they go, the majority tell only after they have gone because they need help in being wiped. A fair proportion take

care of themselves completely. Though many are quite matter of fact about having a movement, others consider it a private matter which demands a closed bathroom door, and even a locked door at 4½ years of age.

Bladder—Children of this age are as a rule able to take full responsibility themselves and have only occasional accidents toward the latter part of the morning or afternoon when they have put off going to the toilet too long. In these periods of relapse they again need helpful suggestions and planning from the adult. They show less feeling for privacy than they do when they have a bowel movement, but are very much interested in watching other people in the bathroom, and show a marked interest in strange bathrooms. They are more apt to tell their mothers before they have to go to the bathroom in a strange house. This demand for the bathroom occurs not only because of real curiosity to see new bathrooms but also because the social situation creates tensions which seek outlet.

Very few children wet at night, at this age, or need to be picked up at 10 to 12 P.M. Some still awake to be toileted during the night and, as discussed under *Sleep*, they still need help, especially in getting back to bed.

BATH AND DRESSING

Bath—The bath is now an easy routine. The child is often capable of washing himself fairly well as long as the mother suggests part by part what he is to wash. He is apt to get marooned on one part of his body and keep washing it over and over again. He also lets out the water and washes out the tub on suggestion. He can now dry himself after a fashion. He is better able to make the necessary wrist and hand adjust-

ments to do a creditable job of brushing his teeth.

The bath may well be shifted to before supper, at 4½ years. The child takes his bath more quickly when he is less fatigued and may be looking forward to having his supper in bed. This shift in time is especially helpful in the winter months.

Dressing—The child of this age usually dresses and undresses himself with very little assistance, though he may need his clothes laid down on the floor, each garment separately oriented so that he can slip into it. He now can distinguish the front from the back, can lace his shoes, and some children can even button buttons. The child may for a while continue to dress parallel with the adult. When the novelty of this wears off he often dresses best in a room alone. A few children become angry if things go wrong, and refuse any adult help at this point. Planning ahead with them as to how to put on a garment successfully usually controls their temper outbursts. Almost all children, even though they dress themselves poorly, enjoy dressing up in adult clothes, especially in hats, gloves, shoes, belts and pocketbooks.

SELF-ACTIVITY

The 4 year old is ready for nursery school every day. He prefers to play with children rather than playing alone. Therefore his play alone is restricted to his play nap, and an evening play period. He now combines his toys into a dramatic setting. People are added to his block structures, cars are placed in front of houses. Girls and even boys may indulge in considerable household activity including the dressing and undressing of their dolls or teddies. Because of the speed of the 4 year old he is a rapid utilizer of material, especially of paper and crayons

and paste. He more often prefers to draw free hand than to color picture books. He is quite happy as long as he is amply supplied, and each new bit of material seems to stimulate him to new abilities.

He is now beginning to admire his products and wants others to admire them, too. He likes to have his pictures put up on a bulletin board (the back of his door is often the place he chooses, with scotch tape taking the place of thumb tacks). He wants his block structures left up, and enjoys explaining their intricacies of building and of meaning. But his admiration is not prolonged. When he returns to his room he will not add to his block structure. He wants to do something "different." If his mother has warned him ahead of time he does not mind if she re-orders his room. He is more likely to resist if he is present during this re-ordering, though he at times accomplishes it by himself.

He now resists confinement in either his room or his yard unless it is self-imposed. He does not want his door to be tied. If he can understand the "rules" he may now be ready to stay in his room the allotted time, and to go back and forth to the bathroom as needed. Some children may have practiced being 4 years old when they were still only three, by having their door untied now and then when they asked for it. Although the majority of children need this type of restraint (having their door tied), there are some who do not need to have any more restraint than a closed door, and others who become resistant over a closed door which they themselves have not closed, and even panicky if their door is tied.

The 4 year old will manage to open his gate or climb over the fence if the gate is not left open. He now needs more scope, more rope, but he also needs the control of rules for he is apt to go out of bounds

so quickly. When he leaves his backyard and goes to the front, he will willingly announce this shift to his mother by ringing the door bell. He is now allowed to ride his tricycle alone on the sidewalk. He willingly accepts boundaries in both directions as long as they are enlarged at intervals.

The 4 year old enjoys this slow receiving of new privileges, the response to "rules." He becomes surfeited all too quickly if allowed complete freedom, or he becomes resentful if he is held too tightly. With the latter type of handling he is more apt to go too far out of bounds. It is the 4 year old who runs away from home.

SOCIALITY

The 4 year old is a truly social being. He not only wants to join a play group every morning, but he wants to be with playmates every afternoon. He now so definitely prefers children that he may even refuse to go to places where there are no children. He is in fact so busy with his play life, that his former interests in helping around the house have been largely given up. He will, however, run short errands outside of the home, which do not require the crossing of streets.

He is actually developing a strong sense of family and home. His mother or father are often quoted as authorities. Things that he sees away from home are compared with things at home, usually to the home's advantage. In fact, he is given to boasting. Methods of management previously used by the various members of his family is now enacted in his social dramatic play. Some families may well be startled by this re-enactment.

Though the 4 year old tends to be bossy and rather domineering, he does well either alone with one other child or in a super-

vised group. His play is smoother than that observed at 3 years because of the actual nature of the social dramatic play of house, doctor, etc., and because of his ability to shift rapidly. Although he plays well with one other child without supervision, he may find it difficult to adjust to a third child. The 4 year old still needs very watchful supervision. It is often at this age that too much is put upon the child. He may now be able to fight his own battles, and acquires more self control because he can handle a situation alone. But many of the battles need never have been fought if proper supervision had been given in the first place. This also applies to the years after four.

Excursions and times with father are highly prized by the 4 year old. Saturday and Sunday take on new meaning because father is home and special things are planned with him. The father realizes that these excursions are still best taken alone with the child, who can adjust to a larger

group especially on a picnic, but who is most relaxed and happy when alone with one adult.

Because of the fuller social play of the 4 year old, his imaginary playmates do not figure as importantly in his daily life as they did earlier. He may still use his imaginary playmate as an excuse for doing things he wants to do or for not doing things he dislikes to do. Some children continue to pretend they are animals, but imaginative play is usually closer to the realm of likelihood with the child pretending to be a doctor, grocer, or engineer. Imaginative play is now more related to group than to solitary play.

[During periods of stress, music, books or cooking may prove to be helpful in organizing the child's behavior.

In planning ahead with the child it is as important to prepare him for a meeting with another child as for a meeting with an adult.]

§3. CULTURAL AND CREATIVE ACTIVITIES

Books

1. Much more control in listening to stories in larger groups over longer periods.
2. High interest in words, creating stories with silly language and play on words.
3. Enjoyment of nonsense rhymes, as in Edward Lear's, "Nonsense ABC."
4. High interest in poetry, especially rhyming.
5. Delight in the humorous in stories, as in "Junket is Nice."
6. Enjoys exaggeration, as in "Millions of Cats."
7. Interest in alphabet books as "The Jinglyling ABC's."
8. Interest in stories telling the function and growth of things, as "Mike Mulligan and his Steam Shovel" and "Tim Tadpole and the Great Bullfrog."

CULTURAL AND CREATIVE ACTIVITIES

9. Particularly enjoys information books answering his "Why?" about everything in the environment.
10. Awakening interest in religious books as "The Christ Child."

MUSIC

1. Increase in voice control with more approximation to correct pitch and rhythm.
2. A few can sing entire songs correctly.
3. More responsive in group singing.
4. Enjoys taking turns at singing alone.
5. Can play simple singing games.
6. High interest in dramatizing songs.
7. Creates songs during play—often teases others on a variation of the minor third.
8. Likes to experiment with instruments, especially combinations of notes on piano.
9. Enjoys identifying melodies.
10. Increased spontaneity in rhythms—likes to demonstrate different ways of interpreting music.

PAINTING

1. Holds brush in adult manner.
2. May work with precision for a long time on one painting.
3. Active imagination with shifting of ideas as he paints.
4. Increase in verbal accompaniment explaining pictures.
5. Makes designs and crude letters.
6. Draws objects with few details.
7. Little size or space relationship—details most important to child are drawn largest.
8. Letters, people, etc. may be drawn horizontally, lying down.
9. Enjoys filling in outlines of objects he has drawn, frequently making them lose any representative character as interpreted by the adult.
10. Beginning of self-criticism.
11. Products have personal value to the child—he wants to take them home.

FINGER PAINTING

1. Continued experimentation with fingers, hands and arms in rhythmical manner.
2. Some representation and naming.

FOUR YEARS OLD

CLAY

1. Large masses of clay used.
2. Increase in representation and imagination.
3. Enjoys painting products.
4. Wants products saved.

BLOCKS

1. Cooperation in building in small groups.
2. Extensive complicated structures combining many shapes of blocks in symmetrical manner.
3. Combines furniture and other equipment with structures, for dramatic play.
4. Enjoyment of finished product and frequently objects to demolishing it.
5. Little carry-over of interest to following day if structure is left standing.

POSSESSIONS

1. Beginning to possess his special contemporaries.
2. Showing off and bragging about possessions to others is common. "Mine's bigger than yours."
3. Is more apt to share possessions with special friends than with others.
4. Shows off new clothes.
5. Strong feeling for teddy-bear. Treats him as a real person, talking to him as a companion and confidant.
6. Proud of big possessions, such as a large bed, about which he can boast.
7. Strong personal feeling for own products made in school; wants to take them home.
8. This is an age of barter and swapping of possessions.
9. May know what a penny will buy and may save pennies to buy more expensive objects. Objects to parting with money.
10. Will help feed and care for pets under parents' direction but not at all dependable about this.

HOLIDAYS AND FESTIVALS

1. Birthdays—Presents are important and he may have asked for special ones beforehand. "Holds birthdays over" others and talks about next birthday party and whom he will invite and whom he will exclude, all during the year.
2. Christmas—There is a real interest in the story of Jesus, which is talked

about and dramatized. Child asks for specific toys for Christmas and talks about them long after Christmas, bragging about size and amount of presents.

3. Valentine's Day—Likes making Valentines to send to others. Has some idea that they are a token of friendship. Great interest in the number received.
4. Easter—Still believes in the Easter Bunny and talks about things Easter Bunny brought him. Still no conception of the meaning of Easter.
5. Hallowe'en—Enjoys Jack O'Lantern and likes to help make his own and take it out in the evening.
6. Thanksgiving—Beginning to have some feeling for the meaning of this holiday. Interested in the story of the Pilgrims.
7. Religion—May sit through a small part of the church service, especially music, but should not be expected to remain through the entire service. Enjoys Sunday School and may say prayers, which he may elaborate from the original. Marked interest in death, heaven, etc. Begins questioning as to the source of things: who made the sun, moon, world. The common answer, "God," either settles the topic without his finding out what he wanted to know, or may lead to the asking of ludicrous questions about God.

EXCURSIONS

1. Excursions are now a good outlet for out-of-bounds behavior. The child enjoys running ahead of the adult but will wait at crossings.
2. Interested in all kinds of transportation and enjoys talking about trips on a train. Not only likes to look at things but is interested in how they work.
3. Can go on a short excursion by himself if it doesn't involve crossing the street.
4. Enjoys nature trips.
5. Interested in planning and carrying out picnics and trips to the beach.
6. Continuing interest in the excursions enjoyed at three.

§4. NURSERY BEHAVIOR

THE FOUR YEAR OLD enters school with less exuberance than the three year old, and is more interested in his companions and older children along the way. He may greet the teacher with "good morning" at

her initiation, but his conversation is soon directed to his companions. He joins a small group and proceeds to undress while he entertains his friends with a long recital of experiences, often introduced with "You know what?" This ability to combine dressing and talking is a marked developmental advance over three years of age when he either talked or worked, and is typical of all routines. In fact FOUR is such a conversationalist that he would accomplish little if he had not acquired the ability to combine talking and acting. His tempo has increased considerably since he was three years of age, and he is capable of undressing quite speedily. He generally waits until his particular friend has undressed, then races into the nursery to play with him.

The guidance teacher has materials such as crayons, clay, and wood ready for the children as they enter. FOUR is quite capable of following his own devices and improvising his own activities when he enters the nursery. But the experience of the guidance teacher has taught her that it is well for her to have materials placed suggestively at the outset of the morning. The child often enjoys taking over some activity that the teacher has started, and he continues in an organized manner.

If several members of the group color with crayons they soon begin to chatter, with more or less social reference. After an interval the group spontaneously dissolves. The children may go off in pairs seeking a new activity, or the boys and girls may segregate in separate groups. This sequence of coherent activity followed by dissemination is illustrated in the following stenotype record of conversation and activity:

9:22 Tim goes to large blocks and begins building an extensive house. Sally approaches and watches him. Tim says, "This is my house. You can't come in."

9:23 Sally, unperturbed, gets two chairs and places them in the middle of the house. Tim again says, "You can't come in!" Sally smiles and says, "Could I be the mother?" Tim says, "I'll be the grandmother." Sally: "No, Tims have to be daddies." Sally continues to carry furniture into the house.

9:25 Karl approaches and looks over the domestic scene. Tim to Karl:

"You can't come in!" Sally to Karl: "Would you like to be the other daddy? Sometimes daddies have rocking chairs."

9:26 Karl: "I brought something to you," handing Sally a block. Sally accepting the block, "All right, but we don't need something in our house." Karl: "This is for when you're ready."

9:27 Karl bringing in more blocks and stacking them in the corner, says to Tim and Sally, "It's time for your breakfast. Hey, you have to have your breakfast. Some sandwiches, some milk and some more milk," handing blocks to them. Karl pretends to eat and says, "This is my soup." Tim and Sally chant with him, "This is my soup." Then, "This is my milk," "This is my paint."

9:28 Elizabeth approaches and is greeted by, "You can't come in," from all three, chanting. Teacher suggests that Elizabeth might be the cook, and the others agree. Elizabeth, however, gets a chair and says, "Hey, we need two chairs for two mummies, don't we?"

9:29 Penny and Marjorie take their crayon pictures to their cubbies. Penny, "I'm going to take my picture home." Marjorie: "I'm going to take mine home too and show it to my mummy."

9:30 Marjorie and Penny run up to the doll corner and start playing with the dolls, carriage, gloves and pocketbook, while Bill, Don and Tony begin building a bridge with large hollow blocks and boards.

9:31 Penny: "Let's play you're sick and I'm the nurse." Marjorie gets in the doll's bed and is covered up by Penny. She takes Marjorie's mouth temperature with a clothes pin and says, "Your temperature is six, eight, you'd better stay in bed."

9:32 Marjorie tries to get up and Penny pushes her down saying, "No, you can't get up. It isn't time to get up." Penny calls to Karl, "Hey, Doctor, we have a sick baby. Me and you." Karl runs up to the doll corner saying, "It's awful cold out today, isn't it? She better have her supper, she'll be shrivelling up in bed. Tell her what I said."

9:33 Penny: "She doesn't want her supper." Karl attempts to feed Marjorie, who resists. She then says, "Go way. I won't invite you to my party." Penny: "But you'll invite me, won't you?" Marjorie: "Penny and Sally and me are coming to my party."

9:34 Karl, undisturbed, changes the subject, picking up blocks. "Let's play these are our skates." All three begin skating, and others join them. Bill, Don

and Tony have made a large bridge structure and are adding smaller blocks on top for chimney, coal and decoration. These blocks are brought by Dick and Jimmy, riding on large trains. Each rides under the bridge chanting, "Coal car," then deposits his load.

9:36 Bill: "No more coal," trying to take train away from Dick. Dick: "I'm going to be finished in ten minutes." He rides away and bumps into Jimmy's train, saying, "A wreck!"

9:37 Bill laughs hilariously then rides noisily across the room saying, "Bang, bang, bang, bing-a-bing. Bing-a-bang-a-bang." Dicks falls off and says, "I had another wreck for my engine, Mr. Engineer."

The chanting and in-group activity illustrates the tendency to tribal social behavior referred to in the age level characterization. Incidentally, the foregoing account also illustrates the harmless, transient developmental nature of this taboo behavior.

In order to forestall still another wreck, the guidance teacher of a lively 4 year old group would at once seize the opportunity to divert this liveliness into related, defined channels. She casually suggests that the engineers might like to deliver mail and gives them some postcards. This stimulates the idea of a post office for the reception of the mail and the bridge is soon turned into a post office, with a window, chute, and loading platform. The smaller blocks are readily dramatized into bags of mail. Postcards are put into action and soon slide down the chute. Presently the whole corner becomes a hive of activity, delivering mail, scribbling messages, loading the mail cars, selling stamps, licking stamps. Soon some of the mail is delivered to the group of girls who are occupying the domestic doll corner. This will lead them by way of response, to send replies to the mail received and they will be making journeys to the post office window. In this way two separate groups come into interaction in the course of the morning.

The 4 year olds are very responsive to verbal direction and it takes only a word from the guidance teacher to remind them that toileting time has come. They go to the bathroom in small groups and waiting turns manage

the toileting with speed and with practically no help. Then they are ready for the mid-morning lunch.

For the 4 year old the mid-morning lunch begins to take on a social quality. He assists in setting the table and each seeks out a companion at whose side he would prefer to sit. The guidance teacher starts the topic of conversation which the children continue readily on their own impetus. If the teacher fails to set the flow of conversation, it is likely to start and continue along silly lines which the 4 year old is prone to affect for his own amusement and that of others.

Rest follows. The rest behavior is not much different from that of the 3 year old. The teacher reads a story to them or they listen to a quiet piece of music.

When it is time to go out of doors, they are able to dress themselves quite quickly. The patterns of outdoor activity are comparable to those under the nursery roof. There is somewhat less necessity for the initial direction of this activity. It may take the form of romping or gross motor climbing on the jungle gym, but the 4 year old is such an inveterate dramatizer that even the gym may be converted into a hospital, the leaves and the sands being put to therapeutic uses.

The 4 year old is likely to go out of bounds and a conducted excursion is a controlled way of satisfying this tendency. He enjoys going on these excursions in a group. He is amenable if his tendency to go out of bounds is given some rein. The guidance teacher, for example, may suggest that the group may run unattended to a distant tree, but she will ask them to wait for her at that tree. The typical 4 year old conforms to such a limitation. The tendency to dramatization is irrepressible and while he is on the excursion he may don a dress-up hat and carry a shopping bag.

On his return to the nursery he is apt to seek out the colored drawings which engaged his attention in the morning and take them home. His mother is greeted with a "Guess what, Mommie" and a flow of conversation which tells about the day's happenings.

§5. NURSERY TECHNIQUES

PHYSICAL ENVIRONMENT

Environmental restrictions such as doors or gates being closed do not hold the child of four years. He responds better to verbal restrictions. The boundaries of a playground can be set verbally, "as far as the tree," "as far as the gate"; or he can be told to run ahead to the corner and then wait. A feeling of responsibility can be built up in the child. He seems to enjoy knowing what the "rules" are, and will even enforce a rule such as that only four children may go into the playhouse. *Four* may forget rules when led on by gang spirit.

At this age particularly it is desirable to provide nature experiences, such as an opportunity to plant a garden or to care for (caged) animals.

For this age, a large room can be effectively divided by means of rugs or some similar device which set up boundaries without creating actual barriers. This holds the children informally to a sphere of interest.

ADJUSTMENT

When adjustment difficulties occur at this age they do not result from difficulty at leaving the mother, but rather from the child's preferring other interests outside of school and not wanting to come to school. Preferred activities may be playing at home with older children or indulging in some particular passion of the moment.

ROUTINES

Routines such as washing, toileting, dressing and undressing, mid-morning lunch and rest go even more smoothly and independently at *Four* than at *Three*. Toileting needs more supervision at this age than formerly because of the extremes of curiosity and reticence displayed by certain children. Some need teacher help in maintaining their privacy from others who are displaying extreme curiosity and silliness in regard to these functions. Mid-morning rest is readily accepted and for the first ten to fifteen minutes may not need to be accompanied by music or reading. The final few minutes are held up better by such accompaniments.

TRANSITIONS

At the earlier ages transitions from one activity to another are best accomplished by shifting the group to another room. At this age, however, the same type of transition may be accomplished within the room by adding new materials.

NURSERY TECHNIQUES

Since this is an age of "tricks," new acquirements such as hopping or skipping can be utilized as activators. For example, "Let's skip to the bathroom."

Their awakening interest in numbers can also be used as an activating technique, as "One for the money, two for the show." "Can you get your suit off before I count ten?" The clock can also be used in connection with their recognition of numbers, as "When the big hand gets on twelve you may get up."

TEACHER

The need for adult techniques is dropping out considerably at *Four*. What previously was in the realm of adult techniques is now being used spontaneously by the children and is under voluntary control rather than being superimposed.

It is easier to think preventively with the four year old by planning situations in advance with him so that he can work them out himself. Since he is characterized by extremes of activity and inhibition, handling him should be a mixture of holding to the dotted line and yet giving him the freedom he needs.

The teacher needs to have ready several different constructive materials such as wood that can be hammered and sawed, blocks, clay, paint, from which the child may choose. Often the appearance of free choice can be given if the teacher is working on a material, thereby arousing the child's interest. Sometimes the same material can be utilized in different ways on succeeding days and plans for this may be made in advance. However, *Four* thrives on variety, and the teacher should provide for this in her planning. With this planning, activities are kept on a higher level than if the morning starts with free play.

The activity of four year olds will often deteriorate through silliness if not controlled. The adult can anticipate when play is about to deteriorate and can bring in interesting new ideas or can elaborate the play. A teacher of four year olds needs a wealth of information at her finger-tips.

Isolation is an even more effective measure at four than at three because of the stronger social drive. The child accepts isolation best if he is given something to do and is made to feel that he is being isolated because he is tired or not getting on well with the other children rather than because he is being bad. Since this technique is resorted to when the child's behavior is already very low, any suggestion of a punishing attitude would only lower his behavior. Being isolated from the group or having a privilege removed is serious enough without further punishment. The child organizes his behavior if told that he may look at a book and that the teacher will be back in a few minutes.

FOUR YEARS OLD

VERBAL

Key words used by the adult at 3½ such as "different," "surprise," "guess," etc., are now in the verbal equipment of the child and are used spontaneously, but he still responds to adult use of them. His use of language is so adequate that he does not respond as markedly to key words as earlier. The general *manner* of handling is more important, i.e., he responds to a man-to-man attitude in conversation and management.

The 4 year old demands reasons with "Why?" and "How?" and frequently can be answered by turning a question back to him.

Whispering is still as effective as at 3½.

Children of this age enjoy new, different, and big words. They use and like exaggeration: "As high as the sky," "In a hundred years." This exaggeration often leads to the telling of "tall stories" which should be enjoyed momentarily by adult and child and then should be brought into perspective by pointing out the difference between real and imaginary.

HUMOR

Their silly language such as "mitsy, witsy, bitsy" can be enjoyed by both adults and children through reading such nursery rhymes as Edward Lear's "Nonsense ABC." If it becomes excessive it can often be controlled by writing down and reading back to the child what he has said.

OTHER CHILDREN

The tendency (so marked at 42 months) of two children to exclude any third from their activity, persists and can be handled by the techniques already suggested.

Tattling and disputes are fairly frequent and should be handled according to the demands of the situation or of the specific child involved. For instance, the teacher may ask, "What do you want me to do about it?", or, "You can take care of that yourself." More serious reports should be commended with some such remark as, "I'm glad you told me that the glass is broken. We can pick up the pieces so that no one will get hurt."

Four year olds enjoy taking on a teacher or mother role in helping to initiate a shy child into group activities. They may do this spontaneously, whereas at three the suggestion usually came from the teacher.

GROUP ACTIVITY

Four is cooperative and imaginative. He can work for a goal such as making a building for dramatic play, instead of merely getting enjoyment from construction as the three-year-old does.

Four year olds are more apt to choose group play and to play better in groups than do younger children. Their activities need more careful planning. As discussed under teacher techniques, the teacher can advantageously give children an initial start by doing something that they can take over and elaborate, or by giving verbal suggestions for play. If they do not have this initial start, their own spontaneous play often begins at a much lower level with racing around and pushing each other. Usually both indoor and outdoor play need this initial start which carries the play through in a constructive manner even though they shift from their original occupation.

FIVE AND THE YEARS AFTER FIVE



§1. FIVE YEAR OLDNESS

FIVE is in focus; FOUR is fluid. Ask FOUR "What scratches?" He will tell you promptly enough "A cat"; but then he will go on to relate about his dog and the dog will chase the cat, and one mental association will chase another. FIVE, on the other hand, with business-like preciseness will say, "A cat," and let it go at that. Comparatively FIVE is curt, clear, and complete. This typifies the maturity difference between the two ages, subject, of course, to individuality differences which come to increased definition at the focal age of FIVE.

This typical maturity difference is, also, revealed in spontaneous drawings. FOUR draws fortuitously and opportunistically; his crude representations metamorphose from turtle to truck to elephant. FIVE has a defined idea in mind *before* and not after he executes his drawing. His outlines recognizably represent his intent. He is capable of self-criticism.

"I want to draw a horse, but I don't know how." Blithe FOUR would never be fazed by a horse!

Similarly, FIVE likes to finish what he has started, whether in play or in an assigned task. FOUR is much less sensitive to incompleteness and inconclusiveness. FOUR rambles. FIVE knows how to stop.

The greater decisiveness of FIVE shows itself in a marked diminution of dawdling. His motor coordinations, his images, his sentences, even his personal-social relations,—his concept of himself, his adjustments to home, school, and community are better defined. Accordingly he gives us an impression of self-containedness. He is not in conflict with himself or with his environment. In emergencies he is capable of calmness, because of the smooth operation of his action system. He does not get lost; he knows his address. If his parents cannot find him, *they* must be lost! This imperturbability accounts for the remarkable stamina which the FIVE YEAR OLD so often shows under privation and hardship.

For the time being he is something of a finished product; he has climbed the developmental ladder and reached a gently sloping plateau. Many thousands of years ago, the race in the evolution of its nervous system reached a level of culture which required a similar degree of maturity. FIVE seems reminiscent of that ancient by-gone stage. He is "a little man" ready to enter the kindergarten vestibule of a culture which today is so vastly complex that it will take him twenty years more to become a true adult. Meanwhile he is too advanced for the "babyish" three and four year olds of the ordinary nursery school. No wonder he is called a forgotten man when he has graduated from nursery school and has no place to go.

He is ripe for enlarged community experience. Home is not quite enough. He is already well domesticated; indeed almost self-dependent in the every-day personal duties of washing, dressing, eating, toilet, sleep, errands, and simple household tasks. He wants to go to school; he is anxious to be on time when he does go; he glows with pride when he brings home his drawings and handicraft for admiration. He is proud of his possessions, proud of his clothes. He has a vivid sense of his own

identity. He likes to come back to home-base, but he displays a pleasing seriousness of purpose and interest in the wide-wide-world. He is beginning to distinguish between truth and falsehood. All told, he presents a remarkable equilibrium of qualities and patterns,—of self-sufficiency and sociality; of self-reliance and cultural conformance; of serenity and seriousness; of carefulness and conclusiveness; of politeness and insouciance; of friendliness and self-containedness. If not a super-man he is at least a super-infant! He is an advanced version of delightful three year oldness.

Now that we have done him full justice, something should be said of his limitations. Despite his excellent general postural control, he lacks many refinements in manual coordination. He has difficulty in making oblique strokes. He is not ready for penmanship. Also for sensory-motor reasons he is not ready for the mechanics of reading. He speaks without infantile articulation, but his conversation reveals great unsophistication.

Here is a transcript of the back and forth talk of a group of bright FIVE YEAR OLDS seated about a table, contentedly drawing birds and bird houses. The theme had been suggested by one of the children and was promptly taken up by all the others. Nora was filling in the sky with bold blue:

Nora: "Pretty soon it will be as long as the whole sky."

Michael: "Pretty soon it will be as long as the whole world." "The cars would come along and get the pictures all dirtied up." "And all the boats would be rubbish boats."

Lester (Talking about his picture): "He's got some mail on his wing—this is the birdie's pole so he can climb down if he wants to."

Ned: "He could fly."

Lester: "But he wants to climb down. He's a different kind."

Michael: "Maybe he's a baby one."

Lester: "Yes, he's a baby one."

All still at table drawing birds and bird houses.

Lester: "My little baby bird flew out the attic window."

Michael: "Maybe he had a flying lesson." "This is going to be a purple one—I always think of everything and I never have time to finish it. This tree is so baby that it only has one branch and no leaves at all. A little baby one."

Lester: "Mine hasn't got no leaves on it."

Nora: "We've got some blue birds in our back yard."

Lester: "I know it."

Michael: "We've got a lot of tulips—they've got buds and they're about to burst. This morning, when I was in bed, I heard them burst."

Ned: "You can't hear buds burst."

Michael: "But I heard them burst, because I have sharp ears."

Ned: "Sharp beer-bottles, you mean."

Michael: "No,—sharp ears."

The foregoing dialogue which occupied about ten minutes, justifies a little semantic analysis, for the clues it affords to the FIVE YEAR mind. The thinking is very concrete; it never gets away from the solid realities of birds, bird houses, buds, audible bursts and sharp beer bottles. There are short upward flights of imagination, but they come back speedily to perch. Abstraction is very meager; it is almost limited to metaphor. A tree is a baby because both are small. There is a vague sense of smallness; but the tree is almost literally visualized as a baby. The bigness of the sky, the longness of the world are faintly conceived, but they are identified with the strokes of the crayon. Perhaps the most conceptual notion of all was contained in the word *lesson*.

In spite of all the naivetes there is a vein of serious auto-criticism in the conversations of the FIVE YEAR OLD. He is somewhat conscious of

his ignorance and intellectual fallibilities. Yet he sets his own flying-lessons and makes frequent forays into the unknown. He naturally has great difficulties with problems of crime and war, but this does not deter him from tackling them:

Lester: "Will you play burglars with me? Who's going to steal from you, red-headed woodpecker?"

Michael: "Hey, Ned, when you said you were a red-headed woodpecker to a policeman, you have to be a red-headed woodpecker because you can't change your mind." "Lester, we'll put the policeman and the birds in our jail, won't we?"

Patricia: "We're going to arrest them too."

Michael: "We'll get our swords—we'll catch the other people O.K.? But it will be a tough job to get those, too."

Lester: "No, it's very easy to get those."

Ned: "We'll tie them all up."

Nora: "You say, 'They can kill you'."

Michael: "My daddy's got a real gun at home."

Lester: "Michael, I have a little plan to tell you. Let's all be soldiers."

Nora: "I'm a soldier and they can't catch me."

Ned: "I'm a bat."

Nora: "No, bats are bad."

Ned: "What do they do?"

Nora: "I don't know, but they're bad."

Ned: "Well, I'll be an eagle then."

When a group of FIVE YEAR OLD kindergarten children recently came back to the familiar haunts of a nursery school which they had attended a year before, they took over, initiated their own enterprises,

called each other by name, and managed their social groupings without conflict or confusion. No intervention or assistance from the guidance teachers was necessary,—another indication of the well balanced organization of the FIVE YEAR OLD action system.

One of our nursery alumni was once asked what college he expected to attend when grown. "Are you going to Yale?" Answer: "No, I have already gone there."

If the period of second dentition did not lie just ahead, we might consider the FIVE YEAR OLD a somewhat finished product. He presents in his person a rather complete diagram of his constitutional make-up. The dynamic traits of his durable individuality are evident. He is the father of the man he is to be.

§2. CHILDHOOD AND ADOLESCENCE

FIVE IS A NODAL AGE because it marks a transition from milk teeth to permanent molars. Physically and psychologically there are many suggestions that the child is reaching a stage of maturity which in a transfigured way corresponds to a very remote stage of life in the history of the race.

Even today under primitive conditions an American Indian child at five or six years of age may show an advanced degree of maturity in relation to his culture. The recent autobiography of a Hopi Indian carries a revealing paragraph as follows:

"By the time I was six, therefore, I had learned to find my way about the mesa and to avoid graves, shrines, and harmful plants, to size up people, and to watch out for witches. . . . My hair was clipped just above my eyes, but left long in back and tied in a knot at the nape of my neck. . . . I wore silver earrings, a missionary shirt or one made of a flour sack, and was always bare-legged, except for a blanket in cold weather. When no Whites were present, I went naked. I slept out on

the housetop in summer and sometimes in the kiva with other boys in winter. I could help plant and weed, went out herding with my father, and was a kiva trader. I owned a dog and a cat, a small bow made by my father, and a few good arrows. Sometimes I carried stolen matches tucked in the hem of my shirt collar. I could ride a tame burro, kill a kangaroo rat, and catch small birds, but I could not make fire with a drill and I was not a good runner like the other fellows. . . . But I had made a name for myself by healing people; and I had almost stopped running after my mother for her milk." (By permission from *Sun Chief*, Edited by Leo W. Simmons, Yale University Press, New Haven, 1942, pp. 460.)

G. Stanley Hall, with a mixture of poetry and science, detected at the age of five years "the ripple marks of an ancient pubic beach now lifted high above the tides of a receding shore-line as human infancy has been prolonged." Such interpretations must not be dismissed too lightly; because the child and the race are in sober fact keys to each other, in the same sense that embryology and evolution are reciprocal keys. The human mind as an action system is a structure. In the individual it grows: in the race it evolved. Against an evolutionary background of hundreds of thousands of years we gain a better appreciation of the task of acculturation which confronts the modern child and youth in the long journey from the nursery school through college. There are three laps to this journey: The Primary School Years; Preadolescence; and, Adolescence.

Primary School Years: The five year old goes to kindergarten. The six year old (with his sixth year molar) is ready for the primary school. Years six, seven, and eight correspond to the first, second, and third "grades" during which society somewhat formally introduces the American child to the tools and elements of its culture,—reading, writing, and arithmetic, and the rudiments of literature, art, and science.

These are years of increasing sophistication. The child has "a world"

to learn. We have noted that the five year old is amazingly ignorant of many simple facts of life; amazingly so because we take them too much for granted. The young child has to acquire these facts by the gradual process of growth. He must assimilate the meanings of countless words and phrases. Otherwise he would remain too unsophisticated in a world which makes almost excessive use of words. At age Five, a ball is something to play with. It is envisaged in terms of use. By age Eight, the child can describe a ball in terms of shape, size, texture, and color. Skill, and pride in skill, come at 8. Thus he enriches his old words with elaborating associations; his vocabulary expands to some 3,000 words. Many of these words are adjectives and adverbs, because he is learning not only the names of things and of actions; but also the names of qualities, of differences, and likenesses.

The child perceives opposites and analogies. He detects differences before he recognizes similarities. At six, he can tell us the difference between *wood* and *glass*; at eight he may be able to tell us in what way they are alike. His judgments are rather concrete, but they lay the foundation for abstractions and generalizations. At twelve, he is capable of defining abstract terms like *courage* and *charity*. There is no way of short-circuiting this concrete thinking of the primary school years. Growth proceeds by gradations. Creeping comes before walking; banging before poking; vertical strokes before oblique; concrete before abstract. The five year old can copy a triangle; yet it takes two years more before he can copy a diamond, even though a diamond geometrically is nothing more than two triangles with a common base.

The geometry of development takes time. The environment of the child and the corresponding organization of his nervous system are infinitely more detailed and complex than we are wont to suppose. The child does not absorb his culture through mere exposure to it; he has to achieve it through the slow but sure mechanisms of growth.

The primary school child therefore is essentially interested in the "here and now." To be sure he likes to dress up; he is fond of dramatics; he converts himself readily into a taxi-driver, a doctor, an Eskimo, a

witch, or even the wind on which the witch rides or the clouds which obscure the moon. Nevertheless his mind is bound to the familiar. There is nothing miraculous about these flights of dramatic imagination. It is impossible to create an Eskimo out of the stuff that dreams are made of. The growing primary child is simply reorganizing and readapting his familiar mental materials (behavior patterns) to penetrate further into his immediate environment and into foreign territory. Like a coral he grows by accretion, like a tree he grows by branching out. Rich experience with things, with handicrafts and group activities, is necessary for the sound development of words, ideas and attitudes.

Preadolescent Years: The years between eight and the teens constitute a somewhat distinctive period in the cycle of human development. Once again, but at a higher and more sophisticated level the child appears to be virtually a finished product. He certainly assumes that he is one and he organizes a life of his own outside of home and school, displaying a significant independence of adult influence. Instead of imitating his elders in naive kindergarten style, he becomes a pre-adult in his own right and takes on adult prerogatives. In the primary years he amassed enough information and stock in trade to make this new self-reliant role possible. Sometimes he evinces a positive lack of interest in chronological adults.

He becomes a small business man. He sets up a lemonade stand. He organizes clubs and gangs; he competes with his fellows, not infrequently resorting to combat, to derision and to feuds and the formation of secret plots. Often the antagonism is inter-sexual. Boys and girls segregate, form separate groups and launch separate enterprises. The leadership arrangements and hierarchies, the jealous defense of possessions and preempted rights, all are reminiscent of primitive tribal modes of behavior, greatly altered, of course, by the folkways of modern culture. Viewed in the deep perspective of the pre-history of the race, such behavior patterns are suggestive of a culminating stage of human evolution when perhaps in

a warm climate, "the young of our species once shifted for themselves independently of further parental aid."

These genetic analogies must not be carried too far. There have been transformations in the cycle of child development since the time of Neanderthal man who lived 500,000 years ago. Life is not as tame as it used to be in those ancient days. The modern pre-adolescent thrills with a much larger number and wider range of adventures through movies, radio, talkies, printed page and funnies. Technological gadgets galore, electricity, the ether and engines implement his imagination.

He is beginning to think in terms of physical cause and effect. As a school beginner he scarcely comprehended how a bicycle operates, could not explain the functions of the sprockets, the pedals and the chain. As a pre-adolescent he acquires a deepening insight into mechanisms and machines. He soars out of the here and now. He also has a more self-detached interest in foreign peoples and distant lands. He gains an intellectual grasp of the more fundamental human relationships. He understands the moral philosophy of most of Aesop's fables.

Nevertheless he is far from a finished product. He has not yet come into the organic inheritance of the most recent acquisitions of the racial nervous system. These await the teens.

The Adolescent Years: Although the brain had achieved almost its adult weight by the age of eight, adolescence brings profound changes in the finer organization of the central nervous system and in the biochemical controls of the organism. With these changes come equally profound alterations of behavior patterns and of emotional attitudes. The basic individuality of the child remains constant enough even during the transitions of youth, but his outlook upon himself and upon his culture undergoes far-reaching reorientations. The higher human traits now make their appearance. They were acquired late in the history of the race; they naturally arrive late in the developmental cycle of the individual. Sometimes they appear with the same sudden spurt which marks his physical growth.

Only a short time ago he was indifferent to adults. Now he becomes sensitive to their opinions, to the proprieties of their behavior; he seeks out among them models to imitate; heroes to worship. He also seeks out heroes of history and of biography. He is now extremely sensitized to cultural influences; the old self-containedness gives way to a search for ideals. Literature, art, religion take on new meanings and may create new confusions in his thinking. He has a strangely novel interest in abstract ideas. He pursues them in order to find himself.

In this pursuit he goes back and forth from one idea to another, in the hither and thither manner of the two and a half year old. The preschool child has similar difficulties in getting his bearings, making distinctions, balancing opposites. It is well to recall that the preschool difficulties represented a temporary developmental stage. In the adolescent we witness comparable growth problems and growth mechanisms.

He is subject to the limitations of immaturity, even though he is now peculiarly susceptible to the influence of other personalities and is striving as never before to come into rapport with the culture of his day. Environmental forces perhaps operate with increased power; but neither he nor his parents in their zeal can transcend the basic laws of development. He continues to grow essentially in the same manner in which he grew as he advanced from the toddling stage of two years, through the paradoxical stage of two and a half, and the consolidating stage of three. When he was a nursery school child we ventured to compare him with an adolescent. Now that he is an adolescent we compare him retrospectively with what he was as a preschool child.

The comparison is just, because the most basic laws of development are universal and uniform. Every individual has at once a unique pattern of growth, and a generic pattern which is characteristic of the species to which he belongs. To understand him both as an individual and as a representative of the species, we need more insight into the biological mechanisms of development. Society has not taken sufficient account of these mechanisms, and has concentrated too exclusively on superimposed acculturation. Too little is scientifically established as to the develop-

mental morphology of the child's mind in the important years after five. We need new knowledge to define the sequences and the content of guidance and educational measures. The developmental interpretations which have proved to be so necessary in the psychological care of the first five years of life apply with equal force to later childhood and youth. For such reasons there are far reaching psychological and cultural implications in the nursery school as a guidance center.

THE NURSERY SCHOOL AS A GUIDANCE CENTER

§1. CULTURAL ORIGINS OF THE NURSERY SCHOOL

COMPLEX SOCIAL FORCES brought the nursery school into being; yet more complex forces are shaping its organization today. The industrial revolution, economic poverty, war, urbanization, the decline of the birth rate, the progressive education movement, and the growth of the life sciences have all played a role in the establishment of day nurseries, kindergartens, preschools and child care centers.

The nursery school is therefore both a symptom and a product of cultural forces. Pestalozzi feared the portent of these forces, and addressed an appeal to the British public in 1818, to inaugurate a system whereby mankind might receive its preschool education from mothers at home. Exactly a century later, however, the British Parliament passed an act authorizing the establishment of nursery schools for children over two

and under five years of age, "whose attendance at such a school is necessary for their healthy physical and mental development." The early British nursery schools were protective social measures to overcome the dire effects of economic poverty. They are historically continuous with the present day preschool nurseries and shelters which have had their inception in the yet more tragic circumstances of the second world war.

The nursery school in America had its beginnings in 1914 as an educational movement. Some of the initial impulse came from Britain. By 1930 about 300 nursery schools had been established, a few of them as integral parts of the public school system. The motivation behind all these schools was primarily educational. But with the onset of the world depression, economic forces began to operate; 3,000 nursery school units serving 65,000 needy children were organized in the thirties, under the Federal Emergency Education Program. Some 1,500 of these nursery schools were continued under the Works Projects Administration, with 150,000 families enrolled in a Family Life Education Program.

The industrial employment of women in the second world war is creating acute conditions reminiscent of the beginnings of the industrial revolution, when Robert Owen established infant schools in New Lanark, Scotland and also in New Harmony, Indiana. Once more the welfare of the preschool child is jeopardized. Once more emergency nursery schools and child care centers are being hastily formed to meet another exigency. All of which suggests that the nursery school is a byproduct of economic conditions as well as a device for cultural control.

This brief glimpse into historical backgrounds emphasizes the potential significance of the nursery school as a guidance center. In its most characteristic form, the nursery school in the United States of America is not a corrective reaction to faulty economic conditions, but is a cultural instrument for strengthening the normal functions of a normal home. In many instances nursery schools in America are associated with research centers devoted to the scientific study of child development and of educational psychology. Such schools, frequently, are attended by children

from prosperous homes. They are part of a broad, diversified movement which is at once sociological, scientific and educational in its inception.

The day nursery has come under similar social influences. Although it may still provide day-time care for children from less favored homes, it considers itself responsible for the mental as well as physical welfare of its charges. Its program is becoming educational, with guidance services added. A democratic culture strives for freedom from educational want as well as freedom from material want.

The American nursery school may also be interpreted as a reaction to the psychological needs of the urban child, beset by the restrictions of modern life. In his fundamental constitution this child is not much different from the rural child of Pestalozzi's day; but the cultural complex in which he lives has both shrunk and expanded to an almost fantastic degree,—shrunk by the confines of an apartment without brother or sister, at one extreme; expanded by the space defying technologies of radio, motion picture, telephone, automobile and airplane. These paradoxical extremes have complicated the whole process by which infant and child are inducted into the culture of today.

In more olden times, the world of nature and of human relations expanded in a rather orderly manner, keeping pace with the maturity of the child. The home was large, the membership of the family numerous, and usually there was yet another child to be born. Some one was always near to look after the preschool child and to take him by graduated stages into his widening world, step by step, as his demands gradually increased. There was free space around his home,—a field, a meadow, an orchard. There were animals in barn, pen, coop and pasture. Some of these fellow creatures were young like himself. He could feast his eyes on them, touch them, sometimes even embrace them.

Time has played a transforming trick with this environment. The apartment child, and to some extent even the suburban child of today, has been greatly deprived of his former companions, human and infra-human. Domestic living space has contracted to the dimensions of a few rooms, a porch, a yard; perhaps to a single room, with one or two windows.

To be sure there are compensating elaborations of his surroundings,—sidewalk, street, traffic lights, automobile, filling station, etc., etc. But the *et cetera* does not usually include ample intimate contact with growing life, with other children, with a variety of adults.

The preschool child cannot articulate this sense of deprivation. Yet he has an irrepressible interest in human beings, and even at 18 months he will exclaim, "Baby!" with ecstatic delight when he sees another child. He was not meant to live alone!

When a perceptive mother witnesses such spontaneous interest in other children, she begins to wonder how she can restore some of the human relations which were a natural part of family life in a simpler culture. She wonders whether her young child should not be playing with other children similarly circumstanced. Should she plan for more frequent visits with the neighbor; should she organize a play group? Besides, she has some concrete questions about what is the best thing to do for her child, questions she would like to ask of someone who knows. Even though she represents a "well-to-do" family, she has a feeling that in some way her child is under-privileged, so far as his full psychological development is concerned.

This is the cultural setting of the nursery school problem. And even when a nursery school is available there is the further question, "Should I, after all, send my child to a nursery school?" Life refuses to be simple in our modern culture.

§2. SHOULD MY CHILD GO TO NURSERY SCHOOL?

THE QUESTION IS CATEGORICAL. For the sake of brevity and pointeness we shall reply by a categorical *Yes* or *No*. But it is also an "if" question. Therefore we list below some of the qualifications which determine the answer. Most of the *No* qualifications are remediable; but it is well to realize that the whole question of nursery school attendance hinges not

on an absolute antithesis, but on a complex set of factors which are largely cultural and which differ with particular homes and particular communities. The practices of different nursery schools vary tremendously with the personalities of the directing guidance teachers and their insight into child development. Finally, of course, the decision will be rested on the welfare of the child, his total welfare including his home-life. Different possibilities must be considered on their relative merits; and an affirmative decision to enter the child should be made in a tentative way if there are serious doubts.

Many parents have adopted the informal (and sometimes too casual) device of a neighborhood preschool play group. Under the direction of a competent leader such a group may function very successfully. It may increase the amount of outdoor life for the children. The proximity to home, the avoidance of transportation difficulties, the similarity to home conditions may all work advantageously. If mothers alone and in rotation are utilized to conduct the group, the arrangement, however, may produce difficulties. Some of the distinctive advantages of a nursery unit with its change of scene and "strange" personnel are lost. Safeguards against infection are overlooked or neglected. Individualized guidance advice as to individual children is not available. Poorly supervised nursery groups conducted by persons with inadequate training must naturally be looked upon with suspicion.

A guidance type of nursery is in a position to render individualized counsel, and to take heed of the special needs of individual children. Such a nursery supplements the home-life of the child and at the same time strengthens it, without attempting to instill "habits" for the purpose of a specific carry-over into the home. The parents are regarded as the fundamental guidance agents for the child. In a democracy it is for them to make the decision which will determine whether *their* child shall attend a nursery unit, and to determine also what kind of unit it will be. Intelligent parent opinion, in the long run, will also determine what kind of guidance nurseries will be evolved in the culture of tomorrow.

With this introduction we return to our categorical question, and to

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the conditional answers which follow. Some of the qualifying considerations will receive special discussion in later sections of this chapter.

Should my child go to nursery school?

YES, IF,—

The child is an only child and has few companions.

The child lives in an apartment and lacks adequate space, materials and opportunity for play, especially gross motor play.

He is three years or more of age. Or, if he is younger, if the school makes special provision for the understanding handling of younger children.

The child's initial adjustment difficulties can be readily overcome by good techniques.

The child's individuality can be respected so that he does not have to conform to standards which are alien to him at the time (such as sociability).

The school is willing to make special arrangements (reduced attendance, vacations, etc.) to prevent overstimulation.

Health safeguards and practices are carefully set up to reduce infections, including common colds.

The mother needs help with her child or if she feels that she does not really understand him.

The mother wishes to supplement the ordinary home-life with a social situation which will expand the child's experience and increase his social adaptivity.

The mother realizes that she really needs brief but regular vacations from constant care of her child.

NO, IF,—

He is under three years of age and the school is not organized to give discriminating, special attention to the younger ages.

His adjustment difficulties prove too great, or if his general health is not adequate.

He turns out to be over-stimulated or too fatigued by the group and attendance seems to be harming him rather than benefiting him. (Thus even a child who seems to be adjusting well may not be benefiting by the experience as shown by a radical change for the worse in his home behavior.)

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The school is not willing to acknowledge and respect individual differences. If it is going to insist on uniform and similar participation from all children. If it places excess emphasis on "cooperation."

The strain of transportation is going to be too fatiguing for the child.

§3. INDIVIDUALIZED ATTENDANCE

IDEALLY, attendance in the nursery school should depend upon the maturity of the child, the disposition and interest of the child, and the motives of the parents. The amount and times of attendance should so far as practicable be adjusted to the optimal needs of the individual child. Just as in the field of feeding the best practice is now based to some degree on self-demand and self-regulation, so attendance in the nursery school should when possible be determined by similar considerations. By self-demand we here mean the capacity of the child to enjoy and to benefit by attendance. Experience has shown that with increasing age the amount of advantageous attendance tends to increase, both with respect to the length of the session and the number of times per week. The following gradient is suggestive of the age differences which have shown themselves in our guidance nursery, attended chiefly by children from homes of favorable socio-economic status.

18 months	1 hour once a week
21 months	2 hours twice a week
24 months	2 to 2½ hours three times a week
30 and 36 months	2½ hours three times a week
42 months	2½ hours five times a week
4 to 5 years	Single session kindergarten
6 years	Primary school, preferably single session

Such a sliding scale leads away from the traditional policy of daily, full-time attendance to graduated and spaced attendance. Sessions are

adjusted both with regard to their length and to the number per week. Just as an individual child may need a gradual induction into the nursery school, so the demands of attendance over a period of years are tempered to his maturity.

The maturity differences are reflected in the time sense of the child at different ages. The 18 month old child naturally has very little sense of time. He does not differentiate the days of the week, but associates attendance at school with some ritual at home. The 2 year old may ask, "School today?" The 3 year old may remember the specific days that he attends school and may ask, "What day is today?" The 4 year old child, if he is in attendance daily, reserves his questions for Saturdays and Sundays.

It is acknowledged that adjusted attendance is not suitable for all conditions, but on the basis of the Yale experience with homes of favorable socio-economic status we can report that parents and children alike approve the arrangement. Both father and mother feel less pushed, because of the free days when the preparations for the nursery school give way to contact with the child at home. The mother can reserve certain experiences like taking the child to market for the home days. The child on his part enjoys the days at home, which gain in their status because of the contrasted school experience. Children are unquestionably less fatigued by part-time attendance and this may be related to our findings that colds and exposure to infectious diseases are reduced as a result. School is considered more of a treat and parents are more apt to have time to stay and observe.

Spaced attendance is in harmony with the needs of the developmental processes in the preschool child. Development during the preschool years proceeds rapidly, and the child uses the non-attendance days unconsciously for assimilating and consolidating experiences which he has previously enjoyed. The argument that there is no carry-over from day to day falls short of the facts of growth, because the mental life of the child is not advanced by habit conditioning so much as by growth organization. According to old doctrines of habituation, training depends upon regu-

larity and frequency of experience. The growth process, however, is such that brief and occasional experiences may have considerable transforming effect upon the individual. For this reason even a restricted nursery school attendance exerts a potent influence upon certain children.

Flexible and part-time arrangements also make it possible for the 18 month old child and the 21 month old child to attend, whereas more rigid practice would postpone the nursery school experience, since it would be unwise to send a child less than 2 years old to a nursery school which made heavier demands. (All good rules are subject to exceptions. There is a type of child who at certain ages, especially at 3 to 4 years, clings to nursery school and perseverates in his behavior. He demands daily attendance for a period and in certain cases his welfare is favored for a time by making such attendance possible.)

It would be easy to point out how a rigid, unvarying schedule of attendance inflicts hardships on certain homes and certain children. Flexible attendance avoids these hardships. It takes account of seasonal variations in the child and of many variations that are a natural accompaniment of the irregularities of growth. Some children of limited stamina benefit from nursery school attendance in the spring and fall when their morale is higher than in the winter months. Difficulties of transportation also introduce complications. Such variations are entitled to respect in the pre-school years. The argument that rigid daily attendance has disciplinary values for the young child is scarcely defensible.

The policy of individualized attendance has a pervasive effect upon the attitude of the parents toward the nursery school, and of the guidance teacher toward the children. It makes the teacher alert to symptoms of poor adjustment to the group to which the child belongs. She will recognize symptoms which suggest the necessity of a vacation period for the child who is not adjusting satisfactorily. The failure to adjust to the group is indicated by aggressiveness and other maladjusted behavior. The teacher and parents can then take counsel together and recognize the advisability of interrupting the regular attendance for a week or more.

If the child shows evidence of over-stimulation in his home behavior the parents feel free to so report to the nursery.

From this summary it is clear that the policy of regulated attendance is designed to protect all concerned, particularly the child. Even the tuition arrangements are kept flexible so that no one feels undue pressure. Tuition charges may be based on the entire term or on actual days of attendance. The latter arrangement favors better cooperation on the part of the mother. She is less likely to send her child to school when he is fatigued or below par.

One of the chief virtues of the method of regulated attendance is that it enables the parents to take a more rational view of the assets and liabilities of their child. The nursery school is a social test for the parents as well as the child and it foreshadows similar tests which will come when the child is confronted with entrance requirements and adjustment to elementary school, high school, and college. The principle of regulated attendance is solely designed to offer the utmost protection for the child. If he is unequal to the social test of constant attendance, this fact should be frankly and cheerfully faced.

§4. INITIAL ADJUSTMENT OF CHILD TO NURSERY SCHOOL

THE INDUCTION of a child into a nursery group is comparable to a weaning process. The mother must surrender her child and the child must surrender, at least temporarily, his mother. How shall it be done?

The manner in which the initiation is accomplished is an index of the quality of the nursery school concerned, although some allowance must be made for circumstances which under given conditions are insuperable. A busy and understaffed day nursery can scarcely undertake all the gentle adjustments which are necessary to overcome the resistance of an intransigent newcomer. So he is left to cry it out. A formal goodbye to mother may even be insisted on, which only makes matters worse. Sometimes, it is

said that he may as well cry it out. "He has to learn someday: he might just as well cry it out now!" the argument runs.

A guidance nursery would consider such a drastic initiation as possibly traumatic and certainly undesirable. Primitive cultures which inflict severe endurance tests as part of the initiation rites at puberty have more justification for their procedures. But the nursery school candidate is no stripling; he is more comparable to a shorn lamb, who in a modern culture is entitled to a treatment tempered to his immaturity. A guidance nursery never entirely overlooks the principle of self-demand, even when an overinsistent parent is *determined* that her child *shall* join the nursery group,—before he is ready!

In actual practice most of the difficulties which may arise at the beginning of the nursery school experience are preventable and so manageable as to be relatively benign. Here as so often happens in the field of child care the problem does not exist until it is created,—by an overzealous mother, an overdetermined father or a misguided teacher. So we would begin with this simple proposition: If your child shows an unmistakable and genuine resistance to joining a nursery group, do not force the issue.

The great majority of children adjust readily to nursery school life after the age of 2 years and almost all do so after the age of 3 years. Our experience in the guidance nursery at Yale has shown that the initial adjustments are greatly facilitated if the induction includes the following steps:

a) A preliminary conference with the parent to talk "the whole thing" over, with candid questions by both parties. b) An introductory report which outlines the developmental history of the child and informally summarizes his present behavior day. c) A developmental examination of the child designed chiefly to determine personality characteristics and his maturity in various fields of behavior. d) An observation of the child's first reactions to the nursery with the mother present or nearby. e) An interview which supplements the developmental examination and which explores the child's previous career and behavior characteristics, with more emphasis on the positive traits than on behavior problems and diffi-

culties. f) Graduated detachment from the mother and progressive introduction into the group.

On the entrance day the child again meets the guidance teacher, whose name the mother has already taken pains to communicate to him. He therefore, has already had an opportunity to practice her name. This is an important feature of the transition because we expect the child to transfer some of his home attitudes to the new person. He is re-introduced to his teacher, whom he first met on the day of the developmental examination. She takes him over and makes him feel at home in the nursery, graduating the new experience to his shyness or his courage, as the case may be. (Introduction to the rest or nap period may be deferred a week or a month in certain cases, in the interests of optimal adjustment.) Then the mother absents herself with or without a goodbye, again depending upon the child's hardihood.

Following conservative procedure, the child is next introduced to a small group of children of similar age, and is protected from any undue aggressors in this group. The first day is of some importance to a child of nursery school age. It warrants the utmost skill and consideration, because much ground is gained if the child's confidence is secured on this first day. Part of this skill may consist in a partial withdrawal of the teacher, who sees the advantage of letting the child make his own adjustment or of having another child assist in the adjustment. A child who is already familiar with the nursery environment becomes a very valuable liaison officer, but such a child must be carefully chosen.

The stages in induction vary not only with the individual temperaments of the children, but with their maturity, somewhat as follows:

18 months: The child adjusts through things.

24 months: Adjusts through an adult (teacher). Teacher must be with him all the time. It is generally better at this age for the mother to go out quietly without saying goodbye.

30 months: The child may need a formal goodbye from his mother.

36 months: Acceptance is the rule at this age. Minor resistances are readily overcome indirectly through simple ruses.

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These precautions and gradients show that the objective uppermost in the mind of the guidance teacher is not a smoothly running nursery for its own sake but optimal protection and guidance of each individual child.

If in spite of these precautions the child shows some difficulty in achieving easy adjustment, some simple measures such as the following may be used:

a) Mother may be permitted to stay in the nursery for part or all of the session.

b) The child may be verbally assured that his mother will wait in the next room for him.

c) He may be told that she has gone out but will come back.

d) Mother may leave her scarf or some personal belonging which will be a tangible token of her certain return and will, because of its tangibility, give him an anchorage.

e) Separation from mother is made at home instead of at the nursery and the child is brought to the nursery by a relative or neighbor, coming, perhaps, also under the herd influence of fellow travellers.

(These expedients are not recommended as clever devices. They are to be regarded as legitimate techniques which are designed to meet and to support the child's psychology.)

Usually the developmental examination, the interview and incidental observation on the day of the examination will suffice to determine whether the child is ready for the nursery school socialization. He may not seem ready to the examiner and to the nursery teacher, but the parent hopes that he will adjust. If the contra-indication is not too strong, the question can be put to a test on two or three occasions. If on these trials he does not show a definite trend toward accepting the nursery group, the parent should be frankly told that it is desirable to postpone the nursery experience. These failures in initial adjustment may be due to temporary causes including a high degree of emotional dependence upon the mother or home surroundings. These difficulties are most likely to occur around 2 years of age, and they usually disappear by 3 years even

in the emotionally dependent child. The 3 year old typically has the hardihood to accept the nursery school.

Amusingly enough the problem sometimes goes into reverse: the child resists leaving the nursery school, even when he is called for by his mother! It is the transition which troubles the child and not his mother. He is torn between two alternatives, both of which have values for him. The reader will not be surprised to learn that this paradoxical two-way response occurs most frequently at about 30 months, suggesting that maturity factors are responsible. Individual peculiarities, however, may also make the child reluctant to go.

Other things equal, the most promising type of initial adjustment is one which proceeds by easy and progressive stages. Children who accept the first day unreservedly and uncritically are the very children who later may lapse into resistance and withdrawal. The more stably organized child adjusts by slow degrees. A little initial shyness, some wariness in his attitudes are to be welcomed, because they suggest that the child is exercising his intelligence and is sizing up the situation in order to become thoroughly acquainted with it.

The concepts of guidance and of growth alone can solve confusions or perplexities which may arise in the initial adjustment of the child in his first formal induction into a cultural institution.

§5. CHARACTERISTICS OF A SKILLED GUIDANCE-TEACHER

WE USE the hyphenated term guidance-teacher to emphasize the fact that the workers in the field of early child development should think of the child in terms of guidance rather than of instruction or training. The most fundamental qualification of a guidance-teacher is her philosophy, her point of view. If the motives which have led her to select work with preschool children are sentimental, she is likely to be too indiscriminating. If she is actuated by a desire to reform, she will attempt too much

and again too indiscriminatingly. Work with preschool children demands a combination of wholesome warm interest in children, and a professional realism with respect to their psychology. This combination heightens both the interest and the social significance of the work of the guidance-teacher. A developmental point of view is the most important feature of her vocational equipment.

At the risk of delineating a paragon we shall outline below the various personal qualifications and skills which make up the professional equipment of a capable guidance-teacher. The human problems with which she works are so diversified and demanding that she needs above all to be alert, adjustable and well-balanced. A sense of humor naturally helps, because it is very easy to magnify the seriousness of numerous problems which prove to be transitory, because they yield to the benevolent correctives of sheer growth. On the other hand she has to have an expert eye for inconspicuous behavior signs and symptoms which superficially lack seriousness but which are very important in the welfare of the child. This expert perceptiveness for the small but significant does not depend upon sporadic intuition, but rather on experience fortified by some theoretical knowledge. With the increase of scientific information it is becoming more and more clear that the guidance-teacher needs an intellectual insight into development as a process. She can get that insight only through study. She needs to study the infant as well as the nursery school child, because through the infant she may get a more transparent view of the meaning of maturation and maturity.

The following personnel specifications and comments are tabulated under three headings: Physical Traits and Demeanor; Mental Traits; Emotional Traits and Attitudes.

Desirable Physical Traits and Demeanor.

Good health, especially freedom from colds:

Good functional vision; peripheral vision particularly useful. Over-channelized focal vision, disadvantageous.

Acute hearing which helps the teacher to identify and pick up the

language cues of a child. With practice and aptitude the teacher is able to echo back these cues,—a very useful accomplishment.

A pleasing voice capable of inflections, modulations and intonations. Excessive inflections startle and confuse the child. An overly calm and matter of fact voice fails to activate him. An effective, flexible voice registers in between.

Nimbleness and manual facility are an asset. A guidance-teacher may have to steady a child on the jungle gym with one arm and keep her attention and the other arm poised for marginal emergencies.

Calm motor demeanor with moderate tempo of movements. A hyper-active person experiences real difficulty in suiting her tempo to the children. Leisureliness of tempo combined with quickness of reaction and alertness of attention constitute the ideal combination.

Desirable Mental Traits.

A fundamental knowledge of the theory and principles of child development. A familiarity with the individual characteristics of each child, interpreted so far as possible in terms of growth rather than in terms of success and failure. (Nor should the teacher credit herself too much personally for improvements in child behavior which may well have a developmental basis.)

A realistic interpretation of the child in terms of himself and his past behavior rather than in terms of other children in the group. A discriminating recognition of individual differences, suiting activities and guidance to these individual differences.

General sensory alertness to environmental conditions: temperature, drafts, doors open or shut, toys under foot, potential physical hazards, marginal awareness of room conditions. (For example, home toys that need to be returned with the child when he leaves, etc.)

Desirable Emotional Traits and Attitudes.

General flexibility which avoids excessive fixation on any adopted schedule or program. Capacity to revise plans on short notice on the

basis of cues detected in the children. A knack for capitalizing such cues and incorporating them into the children's play.

A sensitivity for the psychological moment. This implies emotional flexibility and the absence of a disciplinary or dominating attitude. A skillful teacher exercises patience and refrains from unnecessarily touching children, waits for the right moment and then steps in with opportune, directive guidance. This perceptiveness for opportuneness demands a knowledge of maturity levels as well as individual personalities.

An ability to anticipate and prevent difficulties. Being able to foresee what a child is going to do next.

A warm, outgoing interest in young children; a respect for them as individuals. This fundamental quality is most significantly expressed not in the feelings but in the response of the children to her. By this criterion some teachers are better qualified to work with the older age groups, some with the younger age groups.

A lack of self-consciousness and ability to lose herself in the group. Also a good balance of give and take. An ability to accept criticism and suggestions from parents and to take cues from children.

An ability to take responsibility and yet to get children to take responsibility, at the same time not expecting too much of a child.

A double sense of humor,—it must be double because the guidance-teacher should have an appreciation of the sense of humor of the children themselves as well as a personal sense of humor which enables her to preserve a sense of proportion in the field of social values. There are amusing age differences in the humor sense at various preschool maturity levels. It is a saving sense for the guidance-teacher because it increases the pliancy of her own mental life under the varied conditions of a guidance nursery.

Although no one person is likely to embody in full measure all of the foregoing desirable traits, the listing of the traits may serve a purpose in estimating the aptitudes of nursery school workers at different levels of

responsibility. The temperamental characteristics are of supreme importance. The most elaborate academic training cannot compensate for the absence of fundamental aptitudes which depend upon personality attitudes and emotional and motor demeanors. Underlying motives also count heavily. Society should place a premium upon the recognition and conserving of these temperamental qualities for the benefit of infants and young children.

High school girls should not be sought as caretakers simply for utilitarian reasons. A personnel effort should be made to select girls (and perhaps boys) on the basis of natural aptitude, who can contribute important services in the daytime care of infants and young children. Our home economics courses have already indicated that there are rich human resources of this kind only poorly conserved.

It is also well known that among the colored race there are many women who are supremely endowed with an almost unique emotional equipment which makes their services ideal for infants and young children. There can be little doubt that in the period of post-war reconstruction our culture will place a heavier premium upon the human qualities which are so significantly typified in the devoted and skilled guidance-teacher of preschool children.

§6. GUIDANCE ADAPTATIONS TO INDIVIDUAL AND GROUP DIFFERENCES

THE SKILL of the guidance-teacher depends not only upon her knowledge of child development and of methodology. With experience, reinforced by a background of theory, she becomes familiar with the basic maturity differences of various age groups. She comes to understand what the 2 year old is like and she interprets the individual differences in relation to maturity traits. She realizes that there is no precise science of personality types; but she recognizes a certain characteristicness which distinguishes from each other: the watcher, the dependent child, the

sensitive child, the perseverators and shifters, the dominator, the submissive, the imaginative, the realistic. Furthermore, groups as well as individuals have behavioral individuality.

There is, first of all, the *watcher* who enters all new situations slowly and only after a long period of sitting unobtrusively on the sidelines absorbing every detail of play. He enters into the group much faster if his personality is respected and if he is allowed to wait until he is ready. He will frequently enter the group sooner if approached through a socially gracious child rather than through an adult, for this child is seldom dependent upon adults. He frequently will begin to play by himself on the periphery of the room with an ever watchful eye on the rest of the group. He may report the events of the day in elaborate detail at home, and may re-enact much of the school's proceedings when alone in his own familiar surroundings. This child usually does not enjoy being the center of attention; he is a follower rather than a leader.

The *dependent* child is more difficult to manage. The watcher merely needs a friendly smile or occasional word, or a proffer of play materials placed near him. One soon knows when he is ready to join other children. The dependent child, however, is a persistent appendage to the teacher, trailing her every step, holding her hand, or making demands upon her by crying and whining. To give the over-dependent child the attention that he needs and still supervise the rest of the group adequately is a difficult problem for the guidance-teacher. An assistant may be needed. It is important that the teacher to whom the dependent child is attached should remain with him throughout the day.

Such dependence may last for days or months, but when it is finally broken, beware! The pendulum may swing full opposite. The hitherto clinging, quiet child becomes surprisingly aggressive, hitting and attacking other children whom he seemed to fear only a few days before. Even though he is no longer attached to the teacher, he demands considerable attention, for his social approaches are frequently annoying to other children. After swinging one or more times from dependence to aggression

this kind of child generally strikes a mean and becomes an industrious, enjoyable member of the group.

The dependent child may be in the assertive phase when he enters school. He is aggressive in his first approaches, but in a few days subsides into dependency and tears.

The guidance-teacher needs to keep in mind that the dependent child is sensitive and incomplete and that he needs more protecting than do other children, even when he is on an even keel. Isolation, which may be an organizing experience for some children, is frequently a traumatic experience for the dependent child and may bring about deterioration of behavior. Putting him temporarily into a simpler situation (a group of younger children), or excluding him from his own age group, with an adult, not as a punishment but as a relief from group pressure, will often improve his behavior. Criticism is difficult for him to accept and should be given tactfully at an opportune moment.

There is also the *sensitive* child who adjusts slowly but steadily, and who forms the firm, reliable basis of the group. He demands little of the teacher's attention if he is made to feel comfortable in the group during the first few days of school. He soon loses his self-consciousness and becomes engrossed in other children and in play materials. He has little difficulty in making transitions or performing routines. Frequently he proves helpful in adjusting other children to difficult situations. The guidance-teacher needs to protect this child from fatigue and overstimulation, for he appears more hardy than he actually is and does not protect himself as do the watcher and the dependent child. He fatigues rapidly at the end of the morning, but may not display the usual evidences of fatigue until his mother arrives. Irritability brought on by fatigue may increase after he reaches home and may even aggravate a cold.

Within each of these behavior types we find diverse characteristics. There are, for instance, the *high verbal*, and the *high action* children. In the high verbal child not only is language equipment advanced but also interest in language is keen, and the child responds readily to reasoning; while the high action child is gross-motor minded and is motivated by

action images. The verbal child responds to a comment such as, "You need your sweater on because it is cold out in the yard," while the action child responds to, "After you put on your sweater, you may skip outdoors."

There are also the *perseverators* and the *shifters*. The perseverators may be either watchers or dependents. The watchers may play for as long as an hour with material placed near them, while the dependent children are apt to channelize their activity and play day after day with one kind of material such as trains; or they fix upon one special child. On the other hand, the children who are sensitive to the variety in their environment approach it gradually and often shift rapidly, sampling the entire gamut of materials in the room. If a toy is taken from such a child he finds something equally alluring, and waits his turn for a desired object, whereas the dependent child is often extremely impatient.

The guidance-teacher knows that during an adjustment period the play materials of the perseverator should be protected from the rest of the group until he has gained some social security. Marauders are redirected to other materials with the comment that, "Johnny *needs* that train"; and he actually does need it. When he acquires more self-confidence, he can begin to learn techniques of sharing, and he acquires these techniques faster because he is ready for them. The gradual approach used in so many other connections in nursery school has yet another use here.

Children may also be classified as *dominating* or *submissive*. In general, the watchers are apt to be the submissive children, the aggressive-dependent ones are frequently dominating, while the keenly aware, gradual-approach child may be a combination of both. In this last group are the children who have both the ability to direct group play and to take suggestions from others. They may be dominating with some children and submissive with others. The guidance-teacher needs to be aware of the relationship of one child to another, and to see that one child does not dominate another to the detriment of the submissive child. By skillful planning of activity, and arrangement of groups, all children can be

given some chances to lead as well as to follow. The function of the guidance-teacher is to build up the submissive child and to temper the domineering into tolerance.

If the majority of children in the group are of the dominating type there will be many centers of interest and high activity, while a more submissive group will follow a leader and will constitute larger groups playing together with relative control.

Imaginative and *realistic* children may be distinguished. The most imaginative children are found in the aggressive-dependent group. It is they who have imaginary companions, elaborate fears, extensive play with little equipment (though they may demand much more equipment than other children). If they ask for materials that are not available they are generally satisfied when handed imaginary substitutes. The realist, on the other hand, is annoyed by any such play, has to have the real object, and calls each toy by its correct name. A cream-colored engine which an imaginative child calls "The Milkman" is always just an engine to the realist. One varies techniques with these two types of children, knowing that an imaginative suggestion will generally fall unheeded or be resisted by the realist.

The experienced guidance-teacher realizes that there is considerable variation not only from child to child, but also within a single child from day to day. The child who returns to school after an illness needs much more adult protection from fatigue than the same child when he is in excellent health, and his amount of school attendance should be adjusted accordingly. Knowing the individual characteristics of the children, the alert nursery school teacher detects behavior deviations which are indicative of incipient illnesses. Infection of others may be prevented by immediate isolation.

The teacher should also be aware of individual physiological rhythms in children. One child may have to urinate more frequently, rest longer, or eat more often than his companions.

This analysis could be extended further to types of children with nervous habits, children of special abilities, distinctive temperaments,

etc. The experienced nursery teacher will empirically define her own classifications and methods of approach. She comes to know, for example, the techniques that work best with the watcher, the signs which indicate that he is ready for group contact, and the length of time that it will probably take before he is assimilated into the group play. This knowledge lends poise to her teaching. She does not feel uneasiness simply because he is unoccupied. On the other hand she is not content with mere classifications, leaving the child completely to his own resources. She uses her skill in approaching him indirectly through his major interests, sits beside him engaging him in casual conversation, and gives him some special attention to make him feel that he is a member of the group. Such subtle, casual approaches distinguish the skillful teacher.

Her skill, however, must not be expended upon the individual at the expense of the group. The group also needs finesse in management.

Groups vary in somewhat the same manner that individual children vary. Some groups are easily guided, others are consistently difficult. A group, not unlike an individual, may be relatively unsocial, tangled or disorganized for days on end, and then burst forth with a spurt of integration at a higher level. A three year group may begin the year in the fall with mildly social, constructive play which makes few demands upon the adult. However, by February this same group may become demanding, irritable, tense. A combination of causes may be operating such as growth factors, weather, lowered vitality. But the turbulence is temporary. In another month the group shows glimmers of four year old dramatic play, and even adopts some adult modes of interpersonal control.

The behavior of a group varies with its environment as well as its own personnel. The effects of constructive surroundings and limited materials soon show themselves. The conduct of a group also varies with changes of the adults in charge. One teacher may promote calm, creative behavior in the group while another may stimulate to excess activity. (However, the self-same teacher who is unsuccessful with two year olds, may show real ability with an older group.)

The behavior of the group is much influenced by the amount and kind

of preliminary planning by the teacher. A laissez-faire atmosphere does not foster integrated group behavior. The experienced teacher realizes that different kinds of plans are necessary not only for different age groups, but also for different groups of the same age, and for the same group on different days. She makes a provisional plan of procedure for each day but adapts it to the tempo and interests of the day. She sees that routines, such as toileting and mid-morning lunch, are carried out in the middle of the morning and that there is a proportionate balance of active and quiet play. She senses the point at which group play is beginning to deteriorate, and whether she should divert the activity. She tries to know when to intervene and when to remain an interested observer.

The truly clever guidance-teacher is skilled in watchful waiting. She herself is a watcher rather than a governor. She watches for behavior signs. She waits for her cues. She "steps in" not so much for the purpose of carrying out a preconceived plan of her own, but in order to give constructive and preventive direction to a tide of activity, in the child or in the group. Sensitive to individual differences, she is exercising a high order of skill when she is watching alertly; she is not relaxing, she is waiting for the optimal moment when a quiet well-timed stroke of guidance will yield the maximum developmental result.

§7. THE GUIDANCE FUNCTIONS OF A NURSERY UNIT

A NURSERY UNIT may aim at three related but distinguishable objectives. It may concern itself mainly with semi-custodial care of the children ("minding care," as it is called in England). It may conduct its work on a pre-kindergarten basis, for the avowed purpose of "training the children in good habits." Or, finally it may conceive its work in terms of guidance,—developmental guidance for the children, educational guidance for the parents. These two forms of guidance are inseparably inter-

related and they are typical of the progressive nursery in the culture of today.

A sincere and systematic espousal of the concept of guidance inevitably affects the spirit and the very organization of a nursery unit. When guidance is made the central, controlling objective, the every-day work and methods of the nursery become individualized,—and humanized. The child is envisaged as a member of a family group,—his own true family and not the metaphorical family of the nursery group. The guidance-teacher does not set herself up as a substitute mother. She thinks of the nursery as a supplement to the child's home, designed to enrich his experience rather than to remake his household behavior. So conceived, the nursery becomes a cultural tool which is deliberately utilized to increase the developmental opportunities of the child on one hand; and to assist his parents to understand the nature and needs of his development.

But even these utilitarian functions should not be overemphasized. Why not also think of the nursery as a cultural boon which simply adds to the sum of human happiness? When society learns to use its vast wealth for the conservation of the most promising human traits, it will create conditions and contrivances for early child development, such as hitherto we have been too faint-hearted to invent.

Child guidance and parent guidance are inseparable concepts. In application they overlap to a significant degree. This volume has formulated in considerable detail the various "techniques" by means of which the guidance-teachers in a nursery assist and direct the growing behavior of preschool children. This may be called guidance by direct action.

The guidance-teacher, however, also reaches the developmental complex of a child indirectly through counsel and contacts with the parents. Then her "techniques" operate by direct action on the parent, but indirectly on the child. The term "techniques" is permissible if it is understood that some of the most valuable guidance is unpremeditated, incidental, informal and even accidental:—a suggestive question, a brief hint in connection with the morning greeting, even a facial expression in

reaction to the behavior of the child or a fleeting conversation with the parent as she is about to make her departure. All such interchanges mount up in the course of a year and produce a cumulative and important quota of guidance. Indeed some of the most potent guidance is that which comes most naturally and spontaneously in the course of natural events.

However, there is a distinct place for scheduled guidance. This is formal in the sense that it is based upon fixed appointment and is directed to a survey of the assets and liabilities of both parents and child. A skilled guidance-teacher can undertake a responsible interview which is directed toward what might be called the normal problems of child development and parental care. In this sense all children are normal problem children because no child escapes the continuous problem of growing up. Even parents are still in the process of growth and surely in the process of attempting to understand the meaning of growth. Two or even more interviews a year, which explore the child's behavior and to a reasonable degree the parent-child relationship are an essential part of the program of a well-rounded guidance nursery.* These interviews are not undertaken in the presence of the child. They may include the father as well as the mother and sometimes a grandparent comes appropriately into the picture. Such interviews take into account the child's home behavior as well as the behavior at the nursery.

The guidance-teacher in this type of service functions as a liaison person between the child and the parent. She fully understands that the child's behavior at home may be at either a higher or a lower level than that at the nursery. There is no real equivalence between a nursery group and the family group. In fact the teacher-child relationship is simpler

* Some nursery schools make it a practice to render periodic reports of their young charges, dealing with such matters as attendance; motor coordination; moods; emotional security; crying; language; memory; cooperation; initiative; responsibility; music and art. When these reports are rendered in terms of the child's maturity they serve a descriptive purpose and may to some extent define guidance measures.

Even so, the reports may invite misunderstanding and misuse or may be filed away without any dynamic projection into the actual management of the child. The limitations of the reports accentuate the significance and the vitality of all guidance contacts which emerge in the life situations and are related immediately and concretely to these situations.

than the parent-child relationship. Furthermore the teacher approaches the child with a clean slate without the long association of turbulent periods and old patterns of behavior, and can induce new methods of responding with greater ease than can the mother. Also the teacher has a strong motivation factor in the social pressure of the child's contemporaries, which is usually lacking at home. Conversely, it should be kept in mind that some children do better at home with their mother than at school with the teacher. (The teacher makes only difficulties for herself if she allows herself to come into the role of a mother substitute.)

It is desirable for the parent and guidance-teacher to see eye to eye. One task of the guidance nursery is to strengthen the home situation. The initial parental interview is of special importance because it can take into account the significant events in the prior developmental history of the child. This type of guidance should not be dispensed on a prescription basis. It is fundamentally concerned with interpretation. The parent should not be encouraged to develop undue reliance upon the staff of the nursery. However, parents should be encouraged to report signs of illness or unusual behavior and particularly unusual trends of behavior which cause a legitimate doubt or worry. It may appear to the teacher that a child is adjusting adequately in school but in reality home behavior may show that he is being overstimulated to the extent that eating and sleeping are completely upset.

Many of these problems can be adequately met by telephone conversations after a solid background of mutual understanding has been built up between the parent and guidance-teacher. A fixed period set aside for telephone consultation helps to control this type of guidance and to make it more effective. Needless to say, the guidance-teacher should never attempt to go beyond her depth. She cannot be considered professionally skilled until she recognizes the limitations of her scope and is able to detect premonitory signs of difficulties which demand medical or clinical attention. She does not assume the role of a practitioner. She regards herself as an educational adviser.

There is another form of parent "guidance" which might be called

self-guidance. It is a kind of illumination which comes to parents as a result of their own thinking and their own observations of their own children and of other children. We have found that this type of observation is greatly reinforced by one-way-vision screen facilities such as are described in the Appendix.

This screen although transparent (in one direction) has the peculiar psychological effect of increasing the detachment of the observer from the thing observed. The simple intervention of the diaphanous barrier of the screen creates a new perspective, a wholesome shift toward psychological detachment and objectivity. Seeing is believing. The parent begins to see in a new light. This is an efficacious form of visual education and self-guidance. It reduces the necessity of verbal explanation and exhortation. We have talked less to parents since one-way screens were installed. One-way-vision increases the intimacy, the piquancy, and the objectivity of observation.

The one-way-vision screen has also proved useful in connection with the developmental examination of nursery school children at advancing ages. As already suggested, there are occasional developmental difficulties and behavior disorders which are serious enough to demand expert diagnosis and interpretation. The nursery unit may still render some service with these cases when they are not disturbing to the normal group. When such disturbance is produced the problem should be handled on a more restricted and individualized basis.

This will require a diagnostic examination in which developmental behavior tests are used to ascertain the maturity of the child's behavior and the shape of his behavior patterns. The formal, channelized character of such a diagnostic examination helps to expose the child's behavior equipment to the examiner. Now if the parent can take a station behind a one-way-vision screen and observe the whole course of the examination with its revealing release of behavior patterns,—the orientation of the parent to the problem may be definitely improved. Similar behavior examinations may be conducted at an educational level in the study of the characteristics of non-problem children. These examinations can

also be observed by the parents to advantage through the one-way-vision screen. (Up to the age of 4 years we have found it advantageous to have the parent in the examination room with the child.)

Our modern culture is developing new attitudes with respect to mental examinations, child guidance and parent guidance. Parents are overcoming undue sensitiveness with regard to the behavior characteristics of their children. Modern mothers and fathers appreciate that a realistic attitude with respect to the mechanisms of psychological growth promotes a wholesome parent-child relationship. The nursery school as a guidance center thus serves a far reaching social function.

PART THREE

THE GUIDANCE OF GROWTH





A DEVELOPMENTAL PHILOSOPHY

EVERY CULTURE breeds its distinctive philosophies which reflect the spirit of the age. And potent philosophies in turn reshape the culture which gave them birth. Thomas Aquinas, Jonathan Edwards, John Wesley, Rousseau, Pestalozzi, Froebel, Emerson, G. Stanley Hall,—to mention a miscellaneous few, were marked by their times, and in turn left a mark on concepts of child development. These thinkers were not professional philosophers, but they had ideas. Some of the ideas retain a vitality to this day; others are vanishing, among them Jonathan Edwards' concept of infant damnation and child depravity. In his view of original sin, children were "young vipers and (to God) infinitely more hateful than vipers." Ideas which have dogmatically insisted on fixity, fate, and rigorous absolutes have shown the least permanence; and have, by their harshness, tended to do the most harm to man's progress. More modern concepts of Christianity, of democracy, and of organic evolution

on the other hand have had an ameliorating effect on the interpretation of child life and child care.

Democracies do not have an official ideology to impose. Every parent, every teacher, every child welfare worker must arrive at a philosophy of his own concerning the nature and meaning of infancy and childhood. The philosophy may never be formulated in words; but it will always be implicit in attitudes assumed and procedures applied. In this sense every adult already has some more or less articulate philosophy or group of ideas concerning the relationship of infant and child to the culture of today.

§ 1. ABSOLUTE VERSUS RELATIVE CONCEPTS

THERE ARE three major brands of philosophy which deal with the principles and practices of child care: 1) authoritarian; 2) laissez-faire; 3) developmental.

The authoritarian approach takes its point of departure from the culture. It assumes that the adult culture knows what the rising generation needs to know. The culture proceeds accordingly to impose its imprint. In its extreme form this philosophy holds that children are habit forming creatures, who can be moulded to the patterns of the culture through the processes of learning and of the conditioned-reflex. Behaviorism as a social theory concedes little to the child's heredity, and has great confidence in the power and the authority invested in the environment. It is not inconsistent with totalitarian trends of thought.

Laissez-faire doctrine applies to the child as it does to economic forces. The underlying theory is that "the world goes of itself." Constrain neither child nor culture. Things will work out for the best. For the child will know and select what is best for him if you do not confuse and restrict him. It is the policy of non-interference. It encourages almost complete freedom of action for the child, and requires little effort at intelligent guidance on the part of the adult.

A *developmental philosophy* in temper and in principle lies intermediate between the two foregoing extremes. In matters of child care this outlook is suspicious of absolutes and does not favor license. It is sensitive to the relativities of growth and maturity. It takes its point of departure from the child's nature and needs. It acknowledges the profound forces of racial and familial inheritance which determine the growth sequences and the distinctive growth pattern of each individual child. It envisages the problem of acculturation in terms of growth; but this increases rather than relaxes the responsibility of cultural guidance. Developmental guidance at a conscious level demands an active use of intelligence to understand the laws and the mechanisms of the growth process.

It is easy to see how these three contrasted points of view affect all human relations, including those between adult and child. Discipline under authoritarian auspices tends to be severe, even cruel. The flogging of sailors, corporal punishment, and regimentation are autocratic in temper. Indulgence, excessive freedom, and egocentric self-direction replace severity at the other lackadaisical extreme. The developmental approach does not admit such self-direction. It holds for cultural guidance controls; but it believes in self-regulation and self-adjustment within these controls. It has such confidence in the wisdom of Nature (as opposed to authoritarian cultural goals) that it takes its cues from the child. It aims to conserve all the best potentialities of the child in the broad framework but not in the narrow and rigid compartments of culture.

This requires an intimate knowledge of the growth process; the same kind of knowledge which the present day mechanic has with respect to the operations of an internal combustion engine. Our culture has arrived at that stage of sophistication and discernment that it can no longer carry on satisfactorily in the field of child care without the aids of modern science. There is a type of native intelligence which appreciates the import of growth factors, without formal instruction. But we can scarcely rely on intuition and improvisation in the rearing of children. We must make it our business to better comprehend how their minds grow, how

their personalities are formed. Their psychological care needs an informed developmental philosophy, based upon a sympathetic familiarity with the detailed operations of growth.

In other words we must learn to think of growth as a living reality, rather than merely the label of an intricate process. Growth (or development) is not an empty abstraction; it is a series of events governed by laws and forces just as real as those which apply to an internal combustion engine. The psychological growth of the child is a marvellous series of patterned events, outwardly manifested in behavior. The nervous system is the vital part of the machinery which makes the events possible. It weaves within itself a complicated continuous fabric as it matures, a fabric which comes to light in the actions, the attitudes, the personality of the child. Growth ceases to be merely an abstract or rather useless label, if we think of development as a weaving process which gives shape and structure to the mind.

§2. THE DYNAMICS OF THE GROWTH COMPLEX

THE PURPOSE of this volume has been to give substance and form to this concept of the mind. We do not think that the child mind can be explained in terms of forces and faculties operating from behind the scenes or from the depths of the unconscious. To be understood, the mind must be regarded as a living, growing "organism." In the next chapter we shall summarize the sequences of organization and reorganization which characterize this living *growth complex* from birth through the first five years. These lawful sequences are the foundation of a developmental philosophy of child care. By concentrating our summary in a single chapter we can get an overview of the total unitary action-system in dynamic flow.

What are the outstanding features of this dynamic growth complex? There are three: 1. The Day Cycle, 2. Self-Regulatory Fluctuations,

3. Constitutional Individuality. Each of these has already been discussed separately and at some length. Now we shall see that these characteristics are interrelated, and that they determine the principles and precepts of a developmental philosophy of child care.

1. *The Day Cycle*. Growth is at once a self-renewing, a self-perpetuating, and a self-expanding process. It occurs every day. In a sense it follows a daily calendar; because the earth itself has been taking a daily spin since time immemorial. And so the baby accomplishes a bit of growth each and every day. To no small extent these diurnal increments are patterned. They are patterned by the natural metabolic characteristics of the organism as a storer and expender of energy. They are also inevitably patterned by the culture which conducts its affairs on a day by day basis. The baby likewise transacts his growth business on a diurnal basis. He grows up each day. A developmental philosophy recognizes the growth trends within a single day and over a series of days. The trends will not always be perceptible, but they will be assumed; for a developmental theorem affirms that there is a basic tendency toward an optimum in all normal growth. With this outlook a mother's margin of tolerance is widened. She will not be too disappointed with apparent lapses: and she may even detect a positive value in certain variations which on the surface do not look progressive.

The *Behavior Day*, therefore, has received detailed consideration in Part Two because it bears so significantly upon the economy of psychological development. Each day is sufficient unto itself: but from a philosophical standpoint it takes on new meaning and new interest as part and parcel of a larger cycle of development.

2. *Self-regulatory Fluctuations*. When a larger sector of the growth cycle is viewed in perspective, we find that the course of development does not pursue a straight and narrow path. It deviates now right, now left, now up, now down, although the general trend is toward a goal,

for these deviations are constructive gropings which lay down a pathway. A flowing stream must find its bed.

The living growth complex during the period of infancy and childhood is in a state of formative instability combined with a progressive movement toward stability. The interaction between two apparently opposing tendencies results in see-saw fluctuations. The growing organism does not advance in an undeviating line, but oscillates along a spiral course toward maturity.

In previous chapters we have shown how these fluctuations appear in the organization of the baby's feeding and sleep behavior. When the fluctuations are charted they seem, on first glance, to be irregular and whimsical. But looked at in perspective they prove to be expressions of a basic mechanism of self adjustment. The infant is constantly working toward and working out a schedule which is most suitable for his stage of maturity. From a developmental standpoint this is not an aimless variability.

Similar fluctuations operate all along the course of early development. Strangely enough they often take on the guise of resistance and of an "obstinate" clinging to routines expressed in ritualisms. These ritualisms have been repeatedly referred to: they will be mentioned again in the next succeeding chapter. Precisely because they seem so unreasonable, they need a philosophical interpretation. Through the ritual the child is holding on to that which he has found good. He is not quite ready to take the next step which the parent thinks he ought to take. But he is going to use the ritual as a foothold for a variation which will lead him safely into new territory. Once more from a developmental viewpoint the ritualism has a rationale. It is a growth mechanism; and having a meaning it can be more intelligently guided.

An authoritarian ideology exalts absolutes and professes perfectionism; it places a premium upon undeviated straight line progressions. It tries to whip the organism into line. Fluctuations are frowned upon. A developmental philosophy sees a manifestation of natural law in these

fluctuations. A ship cannot always sail on even keel. It must dip with the waves. The organism of the growing child has comparable ups and downs. It cannot remain in stable balance indefinitely; it may come to relative rest, but then it must again forge ahead. More or less rhythmically it comes into relative equilibrium, passes into disequilibrium, and then returns again to relative equilibrium. This is a dynamic method of development which is of great value in interpreting the child's behavior. We may call it *the mechanism of recurrent equilibrium*. Its operation in shaping the growth complex will be considered in the next chapter, §6. There are discernible periods of relative equilibrium which coincide approximately with the following nodal or key ages: 4, 16, 28, and 40 weeks; one year, 18 months, 2, 3, 4 and 5 years.

Conceived as a growth mechanism, disequilibrium (so often associated with "naughty" behavior) takes on a less moralistic aspect. This form of disequilibrium is a transitional phase, during which the organism is creating a new ability or achieving a reorientation of some kind. It is a phase of *innovation*. The child withdraws from his former self, and also somewhat from his environment, as though to gather strength for a forward thrust, which may be so vigorous that it has the appearance of aggression. But even during the aggressive thrust new patterns are being incorporated into the old. A working balance is achieved between the new and the old and presently the organism settles down into a period of relative equilibrium, of assimilation, and consolidation. This period again is temporary; but it is also recurrent, for time and again and again, the child forges forward by the three step method of innovation—integration—equilibrium. Here is a mechanism and a concept which the developmentally minded parent can use to good advantage in interpreting the child and in shaping suitable guidance procedures. Many of his "strange" and passing fears, for example, are associated with a phase of innovation which leads to introversion. If the fear is wisely handled by the culture, during its nascent phase, it tends to resolve in the equilibrium phase which follows.

3. *Constitutional Individuality.* Now these various fluctuation phenomena are not equally marked in all children, nor do they conform to a uniform pattern. Every child has a distinct mode of growth which is unique, and which is also highly characteristic, for it is grounded in his psychic constitution. Observant parents will begin to detect even in a child's infancy how he meets a new situation, how he travels from one stage of maturity to another. As he grows older they will see this method of maturing repeating itself over and over again. This characteristicness expresses the child's constitutional individuality. Every child, therefore, has a growth career which represents his biological make-up,—his potentialities and his style of growth.

Once more, developmental concepts prove their usefulness. They enable the parent and the student to see the longer stretches of the growth career in perspective. To no small degree during the first year, and certainly by the end of the third year it is possible to ascertain the most characteristic features of the growth plan which the child is likely to evidence throughout the whole growth span, including the period of adolescence. Incidentally, an informed developmental philosophy is nothing less than a boon in interpreting adolescent behavior. Absolute concepts, unrelieved by the relativities of growth concepts, prove to be sterile and misleading as explanatory devices.

A perceptiveness for growth career is most indispensable for accurate guidance in the earliest years. The parent must acquire a sense of timing; must learn to detect the emergence and the recession of a period of disequilibrium; must learn when to disregard, when to step in with a timely aid or prod, and when to withdraw again. These developmental phases run a natural course. They cannot be overcome by duress: they can be assisted by finesse. But finesse is quite impossible without a developmental philosophy based upon a knowledge of the ways of growth.

§3. BEHAVIOR DEVIATIONS

A DEVELOPMENTAL APPROACH is of supreme importance in the management of those variations of conduct which are sufficiently atypical or pronounced to deserve the designation of behavior deviations. In infancy and early childhood it is especially difficult to draw a sharp line between normal and abnormal behavior. In a sense all children are problem children, because none can escape the universal problem of development which always presents some difficulties. On the other hand, there are few forms of malbehavior which are not in history and essence a variation or deflection of normal mechanisms. Both benign and serious behavior deviations demand interpretation and treatment in terms of the mechanics of development.

Many behavior deviations have their inception at a specific age when a mild degree of manifestation is well nigh universal. The deviation is in the nature of an exaggeration, or an "over-individuation." Over-individuation means that in a period of normal disequilibrium, the behavior did not become duly subordinated to the total action system: it grew out of proportion. Nevertheless, it may not reach permanent and pathological dimensions. It may run its course; for even deviations may have a normal course determined by the normal sequences of the growth career. The seriousness of various forms of thumb sucking can be adjudged by this criterion, as will be shown in the next chapter. Transient speech defects such as stuttering often make their appearance at about $2\frac{1}{2}$ and $4\frac{1}{2}$ years during periods of relative disequilibrium. A child of somewhat unstable constitution tends to show his instabilities in a manner characteristic of type as suggested in Chapter 4 in the section on the individuality of growth patterns. Or a relatively stable child, say at the age of 21 months, may show an extraordinary upset of accustomed behavior, simply because his father happens on an exceptional day to come home at noon rather than at five in the afternoon! A knowledge of the

maturity characteristics of this age would help to set matters straight. In dealing with "difficult" children from one to three years of age, simplifications of environment often work wonders.

It is the mother who is attuned to the developmental tempo and tune of the child who best knows how to time and to apportion her guidance. Absolute concepts, rules of thumb, and management devices have very limited uses. Children are constantly changing. What is true today is not true tomorrow. As the old Greek philosopher said, "Nothing is, everything is becoming." The logic of development lies in its sequences. These sequences we shall attempt to summarize in the next chapter, with incidental reference to the behavior deviations which always have a context in normal patterns and normal successions. A genetic philosophy enables us to see this context. It widens the areas of patience and of understanding.

The developmental outlook also tempers the almost irresistible desire to do something about everything and to do it immediately. In child care we fall prone to a certain kind of meddlesomeness,—a tendency to set matters right with dispatch. Now development is a little like the weather. It should be accepted at least within reason. Good judgment will tell us when to put a garment on or off, and which garment to wear. But we should not attempt to substitute the garment for the weather. In over-meddlesome child care there is a vicious temptation to substitute the garments of our own devices for the deeper devices of development.

* * * *

A developmental philosophy has one further and far-reaching virtue: it enables you to enjoy your children. A broad knowledge of the sequences and trends of development, its ins and outs and ups and downs, gives one a general sense of direction. This is not a blind faith but a confidence in the constructive essence of growth. Guidance is given; but the child is in league with Nature and he does his own growing. There is ancient wisdom in the natural mechanisms of growth. An appreciation of the ingenuity and inevitability of the growth mechanisms reduces tensions

and relieves many an illfounded anxiety. One does not have to be so soberly solicitous and grimly determined after all. Of all natural phenomena none is more variegated and marvellous than the cycle of child development. No spectacle offers a more intriguing mixture of the unpredictable and the predictable. Why not enjoy it?

23

THE GROWTH COMPLEX

§1. SLEEP

LIFE almost begins with sleep. Sleep is one of the most primitive functions of which the organism is capable, so primitive that sometimes it may even simulate death. But human sleep does not remain on a primitive, vegetative level. It becomes extensively integrated with the total economy of man's activities. It has undergone great changes in the course of evolution. It undergoes great changes in the development of the child. Our survey of the growth complex may well start with an examination of this paradoxical reaction for producing inaction.

Sleep is behavior. One is accustomed to think of sleep as a cessation of behavior. It is, however, a positive function. It is not a mere stoppage of machinery; it is a readjustment of the whole machinery of the organism, including the central nervous system, to protect the total and remote welfare of this organism.

Perfect sleep is a total response. In this sense sleep differs from other forms of behavior. All other behavior represents an adjustment or an adaptation to more or less specific situations. Sleep, on the contrary, is a totalitarian response which is as inclusive and fundamental as nutrition. Indeed, it can be envisaged as an expression of nutritional economy.

When we undertake to study the characteristics of sleep in infant and child, we find that sleep behavior is genetically inseparable from nutrition. Sleep is not a simple function in spite of its apparent simplicity. It is so complex that physiology has not yet succeeded in establishing a satisfactory theory of sleep. The very abundance of theories indicates that we really do not know very much about its actual mechanism.

Many of the misconceptions concerning sleep arise from the fact that it has been over-simplified. In the care of infants and children it must be recognized that sleep is not a well-defined, uniform response, but that it varies enormously with the individuality of the child and still more with his maturity. The biological function of sleep is to preserve the integrity of the total organism and its entire life cycle. Sleep, therefore, undergoes significant changes with age. The sleep of the fetus, if indeed the fetus does sleep, is quite different from the sleep of the adult: sleep of infancy is different from the sleep of youth. In later maturity and senectitude sleep assumes new forms, some of which are reminiscent of childhood and infancy. These grosser changes in the rhythms, nature, and depth of sleep should at once remind us that in child care we must be prepared to find variations in sleep behavior from time to time; sometimes from day to day. Such variations betray the complexity of sleep as behavior.

The child has to learn to sleep in the same manner that he learns to grasp a spoon or learns to creep and stand and walk. Just as prehension and locomotion undergo palpable developmental changes as they mature, so do the patterns of sleep change with maturity. Perfect sleep must, then, be defined as a form of positive inhibition which embraces the entire organism and which serves best to protect its developmental needs.

Such perfection is ideal. Sleep may be more or less partial. It is quite

conceivable that in defects and deviations of development, certain organ systems do not get an adequate quota of sleep. Sleep may be disintegrated, incomplete, just as the positive behavior of the waking child may be disintegrated and incomplete. Indeed a normal balance must be achieved between waking behavior and sleep behavior. The organism must acquire adequate methods of going to sleep and emerging from sleep. From this broad point of view, sleep behavior is closely related to attention. Certain forms of attention, idling, dawdling, periods of abstraction, naps, "play-naps," to say nothing of lethargy and mild forms of hibernation are all in some manner related to the function of sleep, if we recall our definition that sleep is a biological device for inducing inactivity in order to protect the organism's capacity for later activity.

And what is meant by the fighting of sleep, an interesting form of behavior sometimes found to an intense degree in vital, perhaps generously endowed children? What is the philosophical rationalization of such a contest against an adjustment which nature apparently designed for our best interests?

Sleep has often been compared to death. Shelley speaks of Death and his brother Sleep. Even Shakespeare called sleep "the death of each day's life," but in the very next breath he also called it "great nature's second course, chief nourisher in life's feast." This last characterization is scientifically acceptable, for sleep is more than a sweet restorer. It is a nourisher. It is allied to nutrition.

The early association between feeding and sleep is extremely close. The baby eats to sleep and he wakes to eat which promptly puts him again to sleep, so that the two functions almost overlap. A young premature infant may not stop sleeping at all: he may not even be arousable. His whole muscle tone is limp. Indeed, his "sleep" is very shallow as though it had no structure. He may fluctuate in a thin twilight zone, without definitively sleeping or waking, as though he did not know how to do either, which is true. As he grows older his muscle tone becomes firmer and lasts longer. He is less fragile in every way. His sleep becomes

more defined, more clear cut. He falls off to sleep more decisively, he wakes up more decisively. All of this means that sleep is a complex function which requires developmental organization from the moment of birth (and before). It will never cease to need such organization, for, as we have said, it is articulated with the total economy and make-up of the human action system.

The newborn infant, accordingly, has a few elementary differentiations to make between eating-sleeping-waking. He knows how to nurse. Having "learned" how to sleep, he must learn how to wake and to keep awake. At first he wakes up from sheer necessity (need of food). This requires no special mechanism, as Kleitman has shown, other than a subcortical wakefulness center. He wakes with a demanding hunger cry. Is it pain or is it rage?

As he grows older, he is no longer so purely subcortical. His cry may be delayed a little after he opens his eyes: it takes on a more cultivated fussing quality. In time it becomes intermittent. It intersperses short periods of wakefulness. He is "learning" to stay awake and to enjoy it. His cortex (the higher nerve centers of the brain) is growing rapidly: millions of cortical nerve cells make connection with his eyes, ears, and the twelve oculo-motor muscles that he uses in his staring and looking. This keeps his cortex wide awake. He is developing nerve centers for a "wakefulness of choice."

There are, accordingly, three distinguishable phases to the sleep cycle: a) going to sleep b) staying asleep c) awakening. It is not always easy to distinguish between the first and the third phases. The first depends upon a higher cortical control which enables the child *to release into sleep*; the third upon an active wakefulness nerve center. Is failure to go to sleep due to faulty release or to excessive activity of the wake-up center? Between release *into* and release *out* of sleep lies an intermediate stage: the consolidation of sleep. The task of development is to bring about a proportionate balance between these three phases. As the child grows up the first or release-into-sleep phase seems to give him the most trouble; the third the least. We shall consider each phase in turn, beginning with

the third phase, which appears to be the first to which the baby gives his developmental attention.

1. *The Awakening Phase.* As we have seen, the young baby does not wake up smoothly or expertly. He often wakes with a sharp cry. His waking seems to depend upon an internal prod, a nudge from the gastrointestinal tract or some other incitement from inside. Significantly enough, he does not respond readily to a prod from the outside. He does not arouse easily to a pat or a shake, which confirms the suggestion that waking depends upon an internal mechanism operated by his own private nervous system.

As the weeks go by, he occasionally wakes up more smoothly: he does not always cry, or his cry is briefer and softer. He also wakes up oftener. He becomes more facile. By 16 weeks his waking mechanism is working with comparative efficiency. Thereafter, it does not, as such, make much trouble for the culture. At 2½ years, however, he not only has difficulty in going to sleep; but he has difficulty in getting out of sleep. The two difficulties seem to be related to each other at this highly unsettled stage of maturity. He temporarily loses the knack of waking up. He regains it; but at adolescence he may again show a similar developmental clinging to sleep. Further aspects of waking behavior are considered in connection with the other two phases of the sleep cycle.

2. *The Consolidation Phase.* It does not pay to be too clever at waking. That would, as we say, interfere with sleep. The child must "learn" to stay soundly asleep in sizable stretches. This is the consolidation phase, and it is subject to growth processes. We have, in our research files, a behavior day chart which is several feet tall, for it plots the progressive organization of sleeping and waking periods over a long stretch of time beginning with birth. The dark strands represent sleep: the white waking, as already illustrated by Figure 2 in the chapter on self-regulation. Viewed in perspective, these strands are comparable to narrow streams which at first flow separately, merge, and part for distances, and finally become confluent in wider streams. The night sleep becomes less broken,

the day naps coalesce. At first they are short and irregular; but by 12 weeks, two or three adjacent naps have consolidated into one. The long process of achieving a mono-phasic sleep-waking cycle is under way. At 12 weeks the infant may have 4 to 5 sleep periods in 24 hours: at 12 months, 2 to 3; at 4 years, only one. As an adult, he can remain awake from choice eighteen hours or more. This process is not merely one of quantitative reduction of sleep: it involves complicated pattern transformations, adjustments to the schedule of the entire behavior day, and readjustments to the ever-changing interests and abilities of the growing child.

All sleep is, so to speak, vulnerable; how vulnerable depends upon two factors: the constitution of the child and the maturity of the child. He is especially likely to show disturbances of sleep behavior during transitional periods of disequilibrium, when growth changes are most actively taking place. It is as though the organism had to assist in making readjustments even during sleep. Some of the apparent disturbances may actually have a positive usefulness in the economy of development. (The reader may be reminded that in this chapter we are attempting to interpret all behavior in its relation to an everchanging growth complex.)

Up to the age of 16 weeks, the variabilities of the gastro-intestinal tract tend to discompose his slumbers. Later it may be wetness, or some bodily discomfort, or noises. Still later it may be emotional experiences,—change of scene, undue excitement, new fears. At 15 months, and at 21 months, the child often wakes during the night, and, in an almost whimsical manner, remains awake for an hour or two. The 3 year old is apparently a little less settled during the night than during the day. He may get up out of his bed. He is disquieted if his mother goes out of an evening. Dreams become more frequent at $3\frac{1}{2}$ and $4\frac{1}{2}$ years, a reminder that sleep varies greatly in depth, in scope, and in integratedness; though we must be mindful of Freud's suggestion that dreams are the guardians of sleep. The organism does the best it can even through dreams. Indeed, it works while you sleep. In the recurrent periods of equilibrium, the organism is under the least stress and strain.

The sleep disturbances just outlined are the common lot of humanity. No man, no child, escapes from himself merely by going to sleep. But some individuals have a much firmer grasp on the sleep which they possess.

"Poor sleepers" are comparable to the "poor eaters" who will be discussed in the following section. They do not hold fast to the sleep which they acquire, and they do not consolidate their gains readily. All the foregoing disturbances are intensified in degree and protracted in time. Poor sleepers do not shift readily from one maturity stage to another. They do not tolerate changes in accustomed routines and orientations. Even at the age of 16 weeks a shift from bassinet to crib may not be accomplished with ease. The infant may accept the crib for a day-time nap; but rebels at night. It may take two weeks to wean him to this apparently simple change. At 36 weeks or later, the same child suffers derangement of sleep if his crib is moved from its accustomed position, or if a favorite blanket or pad is removed. Throughout the preschool years, he may be unusually dependent upon an adult, sometimes a particular adult, in his sleep adjustments. He persists longer than normally in a given stage of adjustment, and does not adjust by slow degrees, but in a somewhat abrupt manner. His symptoms tend to exacerbate during periods of disequilibrium. Although his behavior is atypical, it follows normal sequences. It is best understood as a deviation from the normal rather than a perversity. It requires unusual patience and even compliances; for the simple reason that deviations of this type are grounded in the growth complex, and do not respond to rigorous, disciplinary measures. An appreciation of the developmental trend of the deviations makes for sympathetic and wise management.

3. *Release into Sleep.* The new born infant, as previously noted, apparently has no difficulty in going to sleep. He is already there, and his sleep is so intimately bound up with his eating that transitions are easy. Moreover, his sleeping, like his waking, is at a subcortical level. He has neither inhibitory mechanisms nor inhibitory problems so far as sleeping is concerned. But as he acquires wakefulness of choice, these very

problems,—and also mechanisms begin to take shape. His cortex appears on the scene, and once it becomes active, he must learn to inhibit its activity. This is the task of release-into-sleep.

As the child grows older this task becomes more and more complex, for the cortex is both the agent and the storer of his ever increasing experiences. And our high-g geared culture keeps urging the cortex to cumulative rather than rhythmic activity. Not even the cosmic rhythm of night and day can compete with that relentless stress. Therefore, instead of being a simple, vegetative function, which ought to take care of itself, sleep creates, in our modern culture, a host of vexatious putting-to-bed problems. Under more primitive conditions of living, fatigue and ennui play a more prominent role in the regulation of sleep. Under modern conditions, the tyranny of the clock, and the tensions of life complicate the reconciliation of sleep and waking. Some of the difficulties, however, it must be emphasized, are definitely based on maturity factors. The organism, in its nervous system, lacks the equipment for complete voluntary control. Recall how long it takes the child to acquire the simple ability to let go of an object at will. By trying, he can, at 15 months, place one block on another, and relax his hold of it; but even then he tends to release awkwardly, with too much intensity and with poor timing. This is physiological awkwardness. The same kind of awkwardness complicates his sleep mechanisms, particularly during periods of tension and disequilibrium. Going to sleep from choice is a release act, a voluntary inhibition of the wakefulness center. It is like prehensory release.

The ability to release into sleep tends to be at its best during the recurrent periods of equilibrium when the muscles of flexion and extension, and other opposing functions are in check and balance. Accordingly, the 16 weeks old child releases smoothly into sleep. Even during his waking hours, as he lies in supine symmetry, he gives a picture of composure. He has come through a period at 8-12 weeks when the growth tendency toward wakefulness was pronounced. He did not release so well: he may have needed some judicious soothing,—through rocking, singing, or a light to gaze upon. (Of course, the soothing will not work unless it is so

nicely adjusted that he himself contributes just the right amount of self-hypnosis, which is but another name for the function of release-into-sleep.)

DIFFICULTIES AND DEVIATIONS

It is this same period from 8 to 12 weeks, that *thumb sucking* has its onset. This sucking, as we shall see, is related to the control of feeding behavior as well as of sleep. When the linkage to feeding is primary, the sucking may run a short course. If, however, for personality or other reasons, it establishes its main linkage with sleep, it is likely to continue longer and the tie-up with sleep will become more rather than less tenacious. Being well grounded in the growth complex, it runs a longer course. It may have its onset at variable times throughout the first year. It tends to recede somewhat during periods of equilibrium. At 28 weeks, for example, mouthing of objects may take its place. Sometimes it may come to a sharp termination, as though a developmental hurdle had been passed. This again suggests that a combination of personality and growth factors is at work. When the sucking is still strong after the first birthday, it tends to run a long but resolving course, vanishing any time between 2 and 5 years. This type of pattern is related not only to sleep and hunger, but becomes a generalized tension outlet, utilized for escape and relaxation in situations of fatigue, embarrassment, frustration, fear, and also excitement.

Thumb sucking reaches its highest peak between 18 and 21 months, when some children will spend hours, busy with thumb in mouth, either alone or watching other children, but not partaking in their activities. Between the ages of 2 and 3 years, the pattern begins to break. It is less absorbing. However, it is most tenaciously associated with sleep: it not only induces, but it accompanies sleep. There is an exacerbation of intensity at 2½ years, but by 3 years it definitely begins to fade out during the day, and returns to its older linkage with hunger and sleepiness. The 3 year old tolerates removal of thumb after he has fallen to sleep (not

so the 2 year old), but he sucks again when he wakes. At 4 years, the sucking occurs only prior to sleep: it does not invade the domain of sleep at all. A mere minute or two with the thumb suffices. The 5 year old is able to verbalize the situation and cooperates with his parents in any plan of action. If the "habit" is associated with some accessory article like a blanket or a teddy bear, weaning is easily effected by a well-timed removal of the article in whose context the sucking is enmeshed, that is, if the child himself carries through the weaning.

Thumb sucking functions as a real component of the growth complex. Its harmfulness varies greatly with the type of child and associated behavior. The fact that in complicated cases it pursues a characteristic developmental course and undergoes spontaneous extinction, suggests that artificial curbs and restraints have doubtful value. There is no conclusive evidence that thumb sucking, if discontinued by the age of 5 or 6 years, has a permanent deforming effect upon denture and occlusion.

This brief recital illustrates that behavior deviations, as well as normal behavior traits, are subject to developmental sequences. A behavior deviation should always be considered and approached in terms of the total growth complex. This gives rationale to any corrective measures which are used. It overcomes the temptation to unwise "discipline." Even when guidance is ineffective, the developmental interpretation tends to keep the problem in hopeful suspension and in proper perspective.

Whether the thumb is sucked or not, the release-into-sleep presents ever changing problems as the child matures. It is not a specific, press-the-button mechanism, which simply needs training and regularity. It is a complex communication system, which must be hooked up with a network of ever changing higher controls. The hook-up which served for 12 months does not serve for 21 months nor even for 15 months, because the whole city of man-soul (as Bunyan might have called it) has changed: new forms of posture, locomotion, language, and personal relations have come into recent developments. The sleep-release mechanism is not a thing apart; it is enmeshed in this total growth complex.

On the whole, sleep-release during the first year is relatively simple.

The child is almost able to ask for sleep as he goes along. The mother knows exactly what he means by a certain querulous cry and wriggling at the age of 40 weeks. He readily admits being placed on his back in his welcome crib. Indeed, until about the age of 21 months, he tends to accept the whole bedtime situation as a matter of course. He contrives various pre-sleep devices he may need to put himself to sleep. He takes one or two toys with him: he talks and sings to himself: he brandishes his hands before his eyes: he may even indulge in a brief work-out wrestle with his bed clothes. These seem to be relaxational expedients. Some children apparently need them more than others, for constitutional reasons. If the culture is too rigid, and arbitrary, the pre-sleep patterns may become more distorted. Or culture may combine with constitution to set up more or less serious behavior deviations.

Rocking on hands and knees, and bed shaking are common forms of deviation. Head banging and head rolling also have their origin in this period from 40 weeks to 21 months. They may run a transient course; they may be superseded or elaborated in the next growth period. However annoying they may be, it is apparent that they are but variants and exaggerations of normal methods of sleep release,—in our present culture. Removal of the physical restraint of a sleeping bag, postponement of bedtime to increase fatigue, are helpful measures. If the deviation persists beyond the second year, a shift from the accustomed crib to a new bed may bring about a dramatic termination.

As the child approaches his second birthday, a new and important factor comes into the picture. It may exaggerate already deviant behavior. It is bound to complicate normal and ordinary behavior; for it is a growth phenomenon: the child is becoming more dependent upon an adult.

Hitherto, he has managed the sleep situation largely through his own resources. Now he relates himself to someone else at bedtime (and subconsciously during sleep-time). We should, in fact, be grateful for this new manifestation; because it represents an increment of maturity. He is yet too young to go to bed "like a little man" and forget everyone else, including his mother. So, he does not fall to sleep so readily. He calls her

back. He asks to go to the toilet. Sometimes the culture regards this as a clever ruse, a perverse form of filibustering; or as "stalling" which it thinks must be severely and arbitrarily handled. (Strict discipline has a way of becoming very arbitrary with young children.) Actually his pre-sleep behavior is probably accompanied by a transitional instability in the control of the sphincters of the urinary system. Sphincter control, like sleep control, involves inhibitory and release mechanisms.

At the age of $2\frac{1}{2}$ years, going-to-bed and going-to-sleep *rituals* are strong and elaborate. The young baby simply falls off to sleep; the young child walks a winding path along the precipice of wakefulness before *he* falls off to sleep. It is as though he had to pick his way, before he finds just the right spot for the plunge. Rituals must have some such rationale. They cannot be senseless, even though they become grotesquely extended in the deviating child who inveterately finds difficulty in making transitions. He may be over-conscious of his mother in his ritualistic demands. It is often better for him as well as for her to have someone else put him to bed. He then has to modify his ritual, and in the process he can contract it. That is the guidance precept for rituals. Respect them, but by wise manoeuvres, well-timed and nicely modulated, restrict the area of the ritual. In time, it contracts to a vanishing point: it loses its vitality in the growth complex. Unwise combative measures, on the contrary, may lead to a deeper ramification of the ritual into the growth complex.

In ordinary and normal course, rituals are shed by processes of growth. They have a lighter hold after the age of three years. The 4 year old is usually ready for a change from crib to bed. The change is regarded as a social promotion. It is made the subject of advance planning and conversation. It connotes so much cultural prestige that the change may bring about a sharp termination of persistent bed-wetting. As usual, the 5 year old has his sleep-behavior better in hand; although new developmental changes may be expected prior to and during adolescence.

It is probable that many sleep difficulties are man-made rather than child-made, and arise from over-rigid methods of management. Primi-

tive peoples have experimented with various methods of binding and cradling their infants to restrict mobility and to induce that distinctive immobility which goes by the familiar name of sleep. Modern cultures are engaged in similar experimentation, employing such gadgets as sleep harnesses, slumber bags, and snuggle-duckies. Sometimes, the gadget works deceptively like a charm. The child becomes completely conditioned to the device. Another untamable youngster will rend it with the ferocity of a feral child. Yet another child becomes so conditioned that he cannot endure a single omission: he must have this man-made envelope, night in, night out, without exception, summer as well as winter. Such minor complications in very reasonable children show how complex and personalized sleep behavior has become in our culture.

Knowing so little about the mechanisms of sleep, we ought to pay more respect to the physiological self-demands for sleep, not only in infancy, but in early childhood. Half, and over half, of every behavior day is expended in sleep during the early years. It is important that science should further our insight into the determinations and modifiability of this engrossing, powerful function, which is so pervasively identified with the growth complex, with the organization of personality, and the conventions of culture. The mounting tensions of civilization make this a fertile field for cultural control, because sleep is by nature an inhibitory adjustment,—a beneficent terminator of tensions. With increased insight, daytime, as well as night sleep, will be brought under greater personal control and this will be accomplished during infancy and the preschool years.

§ 2. FEEDING

IN THE BEGINNING of the baby's life, there is much sleep; but also there is hunger. When sleep is deepest, respiration is regular, tonus relaxed, the body motionless. But on the least diminution of oxygen intake, breathing hastens, tonus tightens, muscles stir; for air hunger is the most fundamental of all hungers,—and there are many hungers.

Food hunger comes next. This is so imperative that the total body posture alters: mouth opens, eyes open. Crying and seeking movements ensue. The baby wakes to eat, and he eats to sleep. But as we have already shown, in due season he wakes for other reasons; he also eats for other reasons. At first food satiety alone suffices. His alimentary tract, invested with a mucous membrane over 2000 square cm. in extent, affords him some inward glow to which he pays blissful attention. Somewhat before the age of 8 weeks, his smile becomes less introverted. His sensorium is less completely alimentary: it includes vision and sound. His smile accordingly migrates from his alimentary tract to his mother's face; he may even vocalize with a quasi-gastric chuckle on her social approach. Thus horizons widen and the feeding situation proves to be a growth matrix out of which other forms of adaptive, language, and social behavior emerge as though they were so many branchings from a main stem. In truth, feeding behavior with its manifold ramifications constitutes a major network in the organization of mind and personality, throughout infancy and childhood. It lies at the core of the growth complex.

This network, in the early periods of development, is closely related to that of sleep behavior. The developmental factors which organize feeding behavior are not unlike those of sleep. The feeding pattern may be considered in three aspects as follows: 1) appetite 2) retention 3) self-help and acculturation. Appetite is the first phase: the child must seek food and want it. Secondly, he must hold fast to it. This is the phase of retention. At first, he is entirely dependent upon others for the satisfaction of his hungers, but he desires increasingly to become self-dependent, and the culture encourages him in this desire.

1. *Appetite.* Appetite lies at the basis of self-regulation. In Chapter 5, we have dwelt at length on the significance of self-regulation combined with cultural guidance. In Chapter 8, we have shown concretely how these simple principles can be put into application in the first four months to

initiate a good start for mother and child. The same principles apply throughout the period of childhood.

At first, the physiological impulsion behind growth is so intense that virtually all children, whether reared on the breast or on the bottle, after an initial adjustment, can make their hunger known. With time, sheer craving gives way to variations in appetite. Appetite varies in intensity within a behavior day. It also varies from age to age. It differentiates in manifold changes of food preferences. There is an almost inextricable mixture of maturity factors and individual equations.

Appetite is especially strong in the period from 8 to 12 weeks,—so strong that problems of retention, as we shall see later, begin to manifest themselves. Ordinarily, the infant's feeding behavior is well organized at 16 weeks. He eats with moderate vigor: he retains well what he eats. His sucking ability is competent. His sucking propensity is so strong that it tends to interfere with the acceptance of solids at this time.

In the period from 20 to 28 weeks, his appetite curve again shows irregularity. He demands an extra feeding, often in the early hours of the morning, but there is a decrease in the sucking demands, and he is able to adjust to solids before he takes the bottle. At 36 weeks, there is a noticeable increase of eagerness for food. His appetite is reinforced by the mere sight of the food in process of preparation. At 40 weeks, his appetite again comes to a high peak. He eats what is given to him, and he cleans his bowl. Between 1 and 2 years, there is a decrease in vividness of appetite and in the amount of food taken at each meal.

After 18 months, appetite becomes more sophisticated. The 2 year old child begins to name foods; preferences define themselves; he indulges in special runs on foods that he fastens on; he is intrigued by certain colors, he shows bits of fastidiousness as to service; he likes to have his dishes match! By all these tokens, we can see that the food complex within the total growth complex is expanding, differentiating, and taking on environmental specifications. Brute appetite is being civilized through the culture. One hardly knows where appetite stops and acculturation begins. But from time to time, the child initiates food behavior

which is so self-assertive that it seems to spring from the organism rather than the cultural milieu. He indulges in whims: he goes on food jags (Dr. Clara Davis reports a child who, on a self-selection regime, sometimes ate several eggs at one sitting, and went on an egg spree twice a year in spring and in fall!). He tries one food and then another; he adopts favorites, and normally he steadily widens his range of choice. He goes from milk and cereal to fruit and meat, to vegetables, to combinations and salads. The 5 year old has acquired a catholic appetite.

Such, in brief, is the course of a normally developing appetite. There is a sizable and diversified group of children who do not conform to this developmental pattern. Many of them have appeared in child guidance literature as the horrible consequences of poor management. Pop-eye has done his best to set matters right! It is barely possible that parents, in some instances, have been overcriticized. There is evidence that some children are constitutionally *poor feeders* by usual cultural standards. They are also underweight, but their muscular tone is good: motor activity, motor coordination, and intelligence may be superior. They are often good sleepers as well.

The poor eater may manifest himself as early as 12 weeks. His intake is low per meal, and he rarely goes above a low limit; he does not show the ordinary fluctuations, but holds close to his low optimum. He may be a vomiter; he may or may not be a thumb sucker. But his margin of tolerance is narrow. He insists rather orthodoxically on being fed the same food, the same way, in the same place, by the same person. He is slow in making a shift from food *a* to food *b*, and having accepted *b*, he may for a while reject *a*: he does not combine foods progressively in the ordinary manner. He clings long to purée (he distinguishes like a connoisseur between brand G and brand H). He is a poor chewer. He may not be allergic by clinical tests at the age of two or three, but proves to be so on tests made at a later age. This vaguely suggests a generalized pre-allergic status.

In any event, his behavior from year to year indicates a sluggish gastro-

intestinal equipment, or an equipment which has not been fully incorporated into the total action system. It is somewhat as though the latter and the former were developing in slightly separated streams. The dissociation, however, is not complete; and by one device or another, including some very dramatic accessories, the child is fed and grows up. At 5 or 6 years of age he may have outgrown much of his indifference. He is able to throw himself more fully into the task of feeding.

Before that fortunate issue, he eats abstractedly, almost unconsciously, while his caretaker may be amusing him with toys, books, pictures, and reading. Up to the age of 2 years, he eats best with his mother; thereafter, he does better with someone else. The socialized lunch of the nursery school may improve his eating. More often a group is too much for him. He does not like to see others eat; he gags on slight provocation; he cannot abide the sight of slimy foods, etc.

To what extent these peculiarities of behavior are due to faulty management is by no means clear. When the difficulties are chiefly the result of constitutional factors, parents are well advised to respect the child's weakness in this particular field. They should not be too disturbed by periods of stationary weight. It is a mistake to overstimulate the child. It is better to go along with him in his conservatisms, and to wait for an opportune moment to introduce a variation and to widen his diet. He should be handled through things and externals rather than through emotional appeals and dramatic diversions. If complicating personality factors are present they should be reached by indirection and flank approach, but not through the feeding situation. One should be interested in the total growth complex rather than the specific behavior deviation. Although this deviation may cause enough household annoyance, it should be treated without excessive anxiety. Somewhat like thumb sucking, it runs a developmental course, which is based on maturational, constitutional factors.

It is significant that appetite should be subject to so many developmental changes. If we knew all the factors which determine these changes we would have a deepened insight, because they are related, not only to

caloric and dietary needs, but also to psychological traits. For that matter, the subtleties of body chemistry and child behavior are one.

2. *Retention.* Food must not only be sought and taken. It must be retained. Even this is not a simple matter. The gastro-intestinal tract is more than a passive receptacle. Its walls are muscular and active. They move in rhythms and waves which must be coordinated, seriated in the right direction, and brought under partial voluntary control. These are retention problems which can be solved only through progressive developmental changes within the central and vegetative nervous systems.

There is a steady rise in intake up to the age of from 8 to 12 weeks, which may reach a maximum of nearly 45 ounces in one day. It seems that the organism has to stoke up for the exacting growth changes which are in progress. There is a tendency to overload. The alimentary tract does not handle its increased task smoothly. There is more gastric distress and passage of gas in both directions. Premature solids and cod liver oil fed to the infant at this time may exacerbate his difficulties. He regurgitates; he may even vomit, the vomiting, if due to neuro-motor instability, being in the nature of an excessive deviation of regurgitating.

Intake and retention have to be balanced. Peristalsis has to be kept going in the right direction throughout the entire alimentary tract. The organism must also acquire the protective ability to reject and to regurgitate. This poses a definite developmental problem, which brings into prominence a group of infants who have a more or less inherently defective peristalsis control. These infants must be differentiated from those who vomit from birth because of partial closure of the pyloric end of the stomach,—cases of pyloric stenosis and pylorospasm which need medical treatment.

Some of the thumb sucking at about the age of 8 to 12 weeks seems to be more closely related to feeding than to sleep behavior. It is induced by hunger; it continues after the feeding, as though the child, for reasons of his developmental economy, needed additional sucking activity. Or the supplementary sucking may be a physiological adjuvant which keeps

peristalsis moving in the right direction. It serves as an anti-vomit stimulus. He may continue to suck when hungry up to the age of about 3 years. Thereafter, the sucking is mainly linked to sleep.

In most infants, the early instability is limited to regurgitation and proves to be relatively transient. They usually settle into equilibrium at 16 weeks, and are then even able to expel gastric gas without help. This new ability is evidence of stability. It means that the excessive expulsion tendency is coming under control. A favorable growth change has taken place.

In less favored cases, the vomiting recurs and may not terminate until 6 months or even until 2 years of age. In these cases, the principle of self-demand again shows its importance. Taking cues from the child, it becomes evident that he does better with a reduction in the number of feedings. He benefits from longer rest periods which he uses to build up his retention. If young, he needs careful bubbling. He retains better if he is put in a semi-propped position for an hour after his feeding. For similar reasons at 24 weeks or later, he may prefer to take his bottle in two stages. There is a physiological sanction for the split bottle: he is building up retention.

The tendency to vomiting may be based on a specific neuro-motor susceptibility or on more generalized personality factors. In the latter case, vomiting, at the age of 4 or 5 years, may be used as a threat or as an act to dominate the environment. This is an infantile type of hunger strike, a kind of neurotic utilization. There are many grades and forms. Some individuals have a very effective and discriminating equipment for rejecting adverse food intake. They use their ability when it is really needed. They may be very stable persons.

Gastric instability tends to show itself also at about the age of 3½ years, often in connection with school situations. The first signs are those of abdominal pain which, at 4 years, may develop into frank vomiting. The child is unequal to the stress of transition to school. He reacts by a rejection or distaste response: he vomits. The reaction is not limited to the gastro-intestinal tract, for step by step it invades the domain of per-

sonality: he vomits not only in the schoolroom; he vomits on the way to school; later he may even vomit at home on the mere mention of school. This type of vomiting seems to be rooted (if vomiting is ever rooted!) in a sense of insecurity. It often disappears very readily with a little moral support. The mother or a friend accompanies the child to the schoolroom door, or a neighborhood playmate is allowed to join the strange school group. Then all is suddenly well. The vomiting vanishes. Abdominal pain or vomiting, however, should always be regarded as a significant symptom, which demands and repays careful investigation, particularly of associated personality factors.

3. *Self-help and Acculturation.* Although the alimentary tract is racially the oldest part of man's anatomy, it has always preserved a connection with his highest and most recent brain organization. The whole process of feeding is inseparably linked with his manners and customs. Feeding customs and meal time mores constitute an important chapter in cultural anthropology.

It will be interesting to trace in outline how the infant writes himself into that chapter. We have already noted how his earliest smiles emerge out of satiety and lead to a lengthening of the waking period in a sequence as follows: sleeping-eating-satiety-smiling-sociality-wakefulness-drowsiness-sleep. Thus from the beginning, the egocentric act of eating has, nevertheless, a socializing aspect. The socialization of the child is in large measure built around meals. Which, incidentally, makes one wonder whether it is culturally wise to shake a baby out of deep slumber in order to have him eat. It seems to violate the more amiable pattern of nature. One of the tasks of development is to dissociate sleeping and eating with an intervening smile.

The development of feeding behavior in the human infant is a story of progressive self-dependence combined with cultural conformance. The course of this development is not a smooth one. Eating utensils are complex; dining room decorums are exacting; and modern parents are often extraordinarily insistent on tidiness in table manners. Every house-

hold works out its own compromise in this task of accommodating the culture to the neurological and psychological limitations of the child. Needless to say, our practices would improve if we recognized these limitations in advance. Even weaning problems are greatly simplified if our procedures are not imposed arbitrarily, but are adapted to the child's immaturity. Under favorable conditions, he weans himself into ever increasing self-dependence. He does so in primitive tribes; he can do it in more complex cultures.

If bottle-fed, he begins to pat the bottle while he is sucking as early as 20 weeks. Transitions to solids are readily made now because the maturity of the nervous system so permits. At 36 weeks he can usually maintain a sustained hold of the bottle. In another month he may sit up and hold and tilt it with the skill of a cornetist. He can feed himself a cracker. At 40 weeks, he also begins to finger feed, plucking small morsels. At 1 year, his strong drive to stand interferes with the further refinement of sedentary eating habits. Wise mothers learn to accept these postural drives when they make their unmistakable appearance in the growth complex. Upright posture, for the moment, is more than meat; and there is no difficulty in feeding him while he is in the standing position.

At this time, an independent child may, of his own initiative, refuse a bottle. He weans himself with dramatic suddenness. He does not shuffle off a coil, he casts it off. By simple and graduated devices weaning from bottle to cup can be achieved without traumatic damage. A few children who show unusual attachment to the bottle continue with it as long as 18 months to 2 years; in some cultures still longer.

By 15 months, he has "learned" to inhibit his former instinctive grasping of dish and tray. One of the first steps in the fine art of table manners is to resist grabbing the bowl that holds your porridge. This new inhibition is based not so much on practice as on a maturational change in the neuro-motor connections of hand and brain. There is a pretty cultural corollary of this pattern of independence: the child insists that his mother should *not* put *her* hand on the tray. He also handles his spoon manfully;

and begins to feed himself in part, though not without spilling; for the spoon is a complex tool and he has not acquired the postural orientations and pre-perceptions necessary for dexterity.

This surge of independence is a growth phenomenon. It is, of course, counterbalanced by other trends. Indeed, a child who is assertive at 15 months and feeds himself well for a year or two, may then ask for help from his mother, and accept spoonfeeding. At 2 years, he inhibits the turning of the spoon as it enters the mouth, and feeds himself very acceptably. However, the new ability is complex and only delicately supported by his nervous system. Therefore, he feeds himself best when he handles only part of the meal and the food which he particularly likes. Given too much range, he messes and mixes.

It is well to recognize how really difficult these complex acts of motor skill are in their early stages. The child's command of time, space, form, and order are correspondingly immature. If we had a clearer view of the growth complex at the moment, we would pay more attention to details of placement and service, we would see the value of simple arrangements and single courses. It is a mistake to further complicate the child's tasks of coordination and adjustment by trying to assimilate him too soon into the mealtime family circle. He should eat in relative seclusion, unless he is the exceptional type of child who might benefit from the extra stimulation of the full gathering.

When he is a little older he will give cues that lead to occasional admission to the family board. At 3½ years he enjoys a Sunday breakfast with the family. He also likes to eat at his own small table in a corner of the dining room while the family is eating. At 4 years he can join the group a few times oftener; but his talking and restlessness tend to interfere with his eating. He has, however, graduated from meals in his room to meals in the kitchen. At 5 years he manages breakfast nicely with the family and is soon invited to other meals. He is susceptible to the food promotions that come over the radio. He likes to eat away from home, especially at a restaurant. He is more of a man of the world!

Thus we see that when arbitrary procedures are avoided, the child

normally tends to induct himself into the culture which surrounds him. His lapses and resistances arise mainly out of his immaturities; and spring from over-rigid schedules which ignore his self-demands.

There are, however, two more or less clearly defined types of children who do not acquire self-help by the ordinary progressions. They are the *poor feeders* already discussed, and the *perfectionists*. The poor feeder does not have a lusty gastro-intestinal tract which is closely integrated with his personality. He therefore lacks the drive toward self-help, which normally comes from this source. The source is somewhat separated from his motivations. He therefore fails to show an interest in self-help.

The perfectionist also remains dependent. His self-help is retarded and awkward. Apparently, he suffers from a diffuse or generalized motor insufficiency which gives him an excessive amount of caution and disinclination. He will not blunder; he will not undertake an act before he is quite sure of himself. He has an extraordinary sense of form, and sensitiveness to incompleteness of form. He cannot abide untidiness. A spilled drop must be wiped up before he proceeds. He does not even finger feed. He does not like sticky fingers! But he likes ice cream and at the age of 4 or 5 years he can be inveigled into feeding himself this delicacy. By slow stages the self-feeding spreads to other foods; and his onlookers heave a sigh of relief.

Because the deepest and the most vital cravings of the infant and child have to do with food and sleep, his daily schedules of feeding and sleeping assume great psychological significance. We are too accustomed to think of these schedules from the narrow standpoint of physical regimen and to underrate their effects on mental welfare. Only by individualizing the regimen on the basis of growth needs can we meet his organic needs promptly and fully. By meeting them with certainty, we multiply those experiences of satisfied expectations which create an increasing sense of security, the first essential of mental health.

§3. BOWEL CONTROL

THE EXCRETORY FUNCTIONS are controlled by a complex combination of voluntary and involuntary mechanisms,—and by cultural proprieties. These proprieties are expressed in customs, in strict taboos and in repugnances colored by more or less intense emotion. Anthropological literature is replete with details, showing how different peoples react to these natural functions. Present day social groups in our culture have tended to place excessive emphasis on early toilet training, euphemistically called "habit training."

Such habit training is based on the naive theory that practice makes perfect, and that by beginning in time the desired cleanliness can be established early. In its zeal the household often goes to extremes in this particular field of acculturation. Punishment, bribes, shaming, scolding, and relentless instruction are resorted to, and yet the child does not learn. Is there some fault in the child? Or some weakness in the theory of habit formation?

Bowel control is in fact an extremely complicated function. The involuntary act of evacuation consists in peristaltic contractions of the colon, governed by the vegetative nervous system; but the voluntary delay and initiation of the act under variable conditions requires a marked degree of inhibition by the higher centers of the brain. This inhibition cannot be acquired by steady straight line progression, by mere habit training, because the control of the bowel involves not only the sphincter muscles but the entire child as a total organism. Voluntary defecation is not a simple localized reaction, but a total response; and the entire child changes from age to age. Therefore the total response is different from age to age, in its neurology, in its psychology.

This is the reason that cultural control is so difficult; cultural intervention so often misguided. Far from being a simple physiological reflex, bowel control is a complicated behavior pattern profoundly influenced by maturity factors.

The growth of patterns of bowel behavior, therefore, is marked by irregularities, by ups and downs, by self-regulatory fluctuations, comparable to those which characterize the early patterning of sleep and feeding. As the child matures there are changes in the frequency of bowel movements, in the times of occurrence, in promptness of release; in postural attitudes, in self and social reference, in perceptual interest, in anticipatory adjustments, and in the accompanying verbalizations. These changes, to say nothing of personality differences, are developmental in nature. To a significant extent they are beyond cultural prescription; yet they determine the difficulties, the failures, and the successes of so-called toilet training.

The acquisition of bowel control, therefore, must be interpreted in terms of growth and maturity, rather than from the narrow standpoint of habit and learning. The parent's (and the physician's) guidance should be shaped with reference to the developmental factors. The short-comings of the young child cannot be regarded as perversities; often they are paradoxical but positive steps toward ultimate control. It is the discrepancy between the cultural pattern and the maturing behavior pattern which is at the root of maladjustment. The maladjustments are greatly reduced if the lawful developmental factors are recognized in advance. It is the purpose of the following summary to present these factors concretely in their time sequence and in dynamic perspective.

In the first few weeks bowel movements are extraordinarily numerous. They occur somewhat sporadically; but by *4 weeks* they are more closely associated with the act of waking, as though they were emerging out of sheer vegetativeness and entering into the conscious life of the infant. They tend to occur in the daytime and their number falls to three or four daily. By *8 weeks* there may be only two movements and they come not only on waking but also at the close of a feeding and occasionally during a feeding. The infant gives visible evidence of attention, which suggests still more clearly that at least the sensory aspect of this behavior is coming within the scope of adaptive attention. In other words, even now the act is not purely automatic.

By *16 weeks* there may be a definite interval of delay between the feeding and the evacuation, as though Nature were intent on making a more clearcut distinction between eating and elimination. Culture in the form of a vigilant mother notes this delay; seizes upon it, by placing the baby on a receptacle, and for a dozen days, perhaps, the baby is already toilet trained!

But alas, this is the very transitional time when the baby is undergoing an almost revolutionary change in his postural-perceptual makeup. He is beginning to sit up, with support. The neat little "habit" of regularity, which he has just acquired, was suitable to a supine infant and no longer fits neatly into his new behavior equipment. So he "has to learn all over again." And that is precisely what he is constantly doing throughout the whole period of his rapid growth. Changes in his postural, prehensory, adaptive and emotional behavior are reflected in changes in his bowel behavior. If he had remained on a 12 to 16 week level of maturity he would remain "trained."

At *28 weeks* his movements show temporary irregularity. They are no longer closely associated with waking or eating. One may occur early during the morning in the play period, another late in the afternoon. A few infants, chiefly girls, fuss when soiled; but most infants are indifferent and usually are resistant to "training."

By *40 weeks* the capacity to sit has been well mastered, and for a period of several weeks the infant responds to training; that is he reacts adaptively to toilet placement. He grunts and looks up at the mother's face during the act; all of which means that the behavior pattern is undergoing progressive elaboration, and becoming more completely incorporated into the child's action system.

But by *1 year* postural developments again introduce complications. "Successes" are less frequent; resistance again appears; the relation of looking at the mother also is lost. Some of these irregularities and apparent losses may be ascribed to the assumption of the upright posture. The irregularities occur because the nervous system is undergoing a reorganization which simultaneously has to take care of the several sphincter

controls, the mastery of standing up, and obedience to cultural directions. If the various developments proceeded on an even front there would be no fluctuations, no necessity for interweaving with its alternating rhythms and accents.

By *15 months*, standing upright is already well achieved and the irregularities and resistances lessen. The child now likes to go to the toilet. Some children of this age instinctively assume a squat position, as though they had just come by inheritance into an ancient pattern. On the toilet they often show prolonged sphincter contraction; they release this contraction on removal, as though waiting for the stimulus of the diaper. This again is a temporary phase, which reveals that the developmental task is to achieve a working balance between contraction and relaxation. Each at first comes under voluntary control separately. Coordination of the two comes later. First a then b; then a:b::b:a.

By *18 months* contraction is sometimes too strong, at other times release is explosive. Words, also, are coming into the total behavior situation, and they play no mean part in personal and cultural control. The articulate child who is able to say "Toidy" and to relate it to the bowel movement thereby increases his voluntary control. This is the type of child who thenceforth may have few accidents. He is trained, because he has matured all the requisite components for a pattern which is at once personal and cultural.

A second type of child with the same amount of "training" is slow in "learning." He does not use words as aptly. He is more interested in sounds and non-essentials. He does not fasten on the salient features of process and product. He has to progress by more intimate and direct experience. He may even dabble with the feces. Innocent forms of "stool smearing" have their inception in this circumstance. He does not relate the act to a social setting; he does not relate it to his mother. He relates it to his own taking care of himself. He is likely to have his movement in mid-morning while he is alone, standing in his crib or pen. Occasionally he may cry out in distress as though he did not know what it is all about.

There may be a simple guilt sense, but we are inclined to ascribe such symptoms to a combination of physiological and personal awkwardness.

At *21 months* there may be a transient period of physiological lability manifested in a form of diarrhea which is not traceable to mucoid irritation. During the same period there may be a marked increase in the frequency of urination. This suggests another transitional stage during which higher nervous controls are being incorporated.

The *2 year old* is quite trainable if he is permitted to take over himself. The parent removes the child's pants and then leaves him to his own devices. Some children manage best when divested of all clothes. This freedom apparently favors a more totalized response.

At the paradoxical age of *2½ years*, the child naturally shows a tendency to extremes and exaggeration. At this period he may not have a bowel movement for a whole day or a succession of two days. The organism is acquiring an increased span of retention, but in so doing it temporarily exaggerates a constructive growth trend. Fruit laxatives are a legitimate cultural aid.

By the *age of 3* there is an increased ability to withhold and to postpone. The daily bowel movement tends to occur in late afternoon or even after supper. The child accepts and even asks for cultural help.

By the *age of 4* this function has become a private affair. The child manages almost completely for himself. He insists on a closed bathroom door, but is inquisitive to ascertain how this function occurs in others. He has curiosity about animal behavior and is somewhat perplexed by their indifference to the conventions of human culture. He has a child-like interest in volume, color, consistency and conformation. This interest is wholesome and intelligent, not immodest. In all his aspects, the *4 year old* is a frank, forthright individual. In spite of his independent competence, he may occasionally have an accident, by way of tension outlet under excitement or strain.

Slight incontinence occurs at *6 years* of age under the stress of school life. By this time he has become a member of the social group ready to

cast hot aspersions on any member who shows lapses in the field of elimination behavior.

Culture has put opprobrium on any weakness of this kind, and yet in the phrase "intestinal fortitude" it makes half humorous acknowledgment of a human frailty. The fact that under excessive strain even the adult shows such frailty should make us more sympathetic to the developmental difficulties of the young child.

The foregoing developmental survey, however, is not intended to overstate these difficulties. On the contrary, many of the disappointments and the emotional tensions and perturbations which parents encounter in toilet training are self-afflicted. If the complexity of the growth mechanisms is recognized, and if the organization of bowel control is understood in terms of growth, the tensions subside and the child is spared unnecessary confusions.

Although the developmental sequences which have been outlined are typical, they will naturally be modified by individual differences in psychic constitution. Benign and transient stool exploitation (stool smearing) has already been mentioned as one deviation. It may occur at any age from 1 to 2½ years. It may occur once or twice, intermittently, or in some instances two or three times a day. It usually originates in a clumsy effort at self care; it may have the novelty of self discovery and the stool is naively exploited as though it were so much plasticene; it may even be neatly disposed on the door trimmings with some respect for design.

When the propensity is unduly prolonged and does not yield to common sense measures, it may be regarded as a symptom of poor personality organization. The child is functioning in a fragmentary way and is not assimilating his toilet behavior into an integrating action system. He does not have a sufficiently vigorous sense of self when he is alone to subordinate this, to him, interesting and half autonomous behavior. Significantly enough when he is with another person he does not indulge in the behavior at all.

The more frequent and milder manifestations of this malbehavior are readily overcome by providing plasticene for exploitation, by dressing

the child in impervious coveralls, and by encouraging self-management by slow degrees. Needless to say, marked emotions and severe disciplinary measures harm rather than help.

In the whole task of toilet acculturation parents are in danger of expending too much emotion and too little wise tolerance. When we take a long range view of the underlying developmental mechanisms, we immediately see the child's growth problems in a more rational light. That is the basis of intelligent guidance.

§ 4. BLADDER CONTROL

THE MECHANISMS which govern the bladder are comparable to those which govern the bowel. In both instances we are dealing with an involuntary mechanism, into which voluntary control is incorporated through the slow and devious processes of development. The vegetative nervous system and the higher brain centers are coordinated to bring about this control. An extremely elaborate network of nerve cell connections must be built up during the first five years of life. And even then the controls are not perfected; growth continues through adolescence, and the bladder walls and sphincter always remain very sensitive to the psychical activities of the individual, whether in infancy, childhood or adult years. The bladder is a component of the genito-urinary system and inseparable from the total organism. Voluntary urination is not a simple local reaction, but a total response of a total organism which is subject to the manifold changes of growth and maturity. These changes are reflected in times and modes of elimination, in postural attitudes, in motor and verbal adjustments and in psychological orientations.

The acquisition of bladder control, therefore, is marked by the same variabilities, the same ups and downs and regulatory fluctuations which we have noted in tracing the development of bowel control. Indeed our studies have demonstrated a significant correspondence in the growth of these two functions from age to age. There is almost a parallelism which

is based upon common, coinciding maturity factors. Naturally the guidance and "training" procedures will also have much in common.

At about *4 weeks* of age the infant may burst into a brief cry during sleep on the occurrence of micturition. It is as though the passage of the urine and the consequent wetness punctured the unconsciousness of sleep with a glimmer of wakefulness. The infant must learn to wake, and these early experiences in bladder and bowel response may represent faint acts of attention. Indeed the whole development of voluntary bladder control consists in the formation of increasingly specific and elaborate patterns of attention.

By *16 weeks* the number of daily micturitions has decreased and the volume of certain micturitions has definitely increased. Nature is channelizing the output by the same developmental methods whereby she channelizes and consolidates the baby's naps.

At *28 weeks* this is evidenced by soaking wet diapers. Intervals of dryness from one to two hours in length now occur.

At *40 weeks* it may be noted that the baby is dry for a whole hour, after a given nap, or after an hour's ride in his carriage. Capitalizing the import of these dry periods, the mother toilet-places him immediately after the nap and the ride. A few children can be "trained" in this way as early as 28 weeks. But the control is limited to one or two episodes during the day, and is subject to lapses. The results are not permanent or deepseated and they do more credit to the mother's vigilance than the baby's self-control. They are not permanent, because the new postural abilities create new complications, which require further reorganization of his total behavior equipment. It must always be remembered that a single function like bladder control, feeding, or sleep is always part of an ever changing growth complex; and that any individual function or "habit" is inevitably modified by ever changing contexts. Habits do not grow. The child grows.

As he grows he acquires experiences which direct his further growth. At 40 weeks and later, it will be recalled, his index finger becomes a prying instrument for exploring his environment and for penetrating

into the third dimension. Accordingly he probes on occasion into urine which he has produced. Although he does this only a few times it helps him toward an understanding of what is actually a complex situation.

At 1 year dryness after nap may persist. He may show intolerance of wetness at certain times of the day. Often he responds to toilet placement, and would appear to be a good candidate for training; but the development of standing and walking apparently introduces difficulties and resistances. Past learnings prove ephemeral.

At 15 months postural difficulties have lessened. He likes to sit on the toilet, and responds at optimal times. But at other times he resists. This is because he is in a transitional stage in which contraction of the sphincters of the bladder eclipses relaxation. His retention span has lengthened to two or three hours. Placement on the toilet may stimulate him to withhold urine. He exercises this capacity while he sits. The moment he is removed, he promptly releases urine. This is a common household phenomenon. The mother, unaware of the growth factors at work, interprets the whole performance as wilfulness. If exasperated she may resort to unwise discipline. It should be recalled that the same type of behavior shows itself in bowel situations. This also is the time when the child has not yet gained modulated control of manual release. Having seized an object he may hold it in his hand and "let go" with exaggerated release. It takes time for the nervous system to attain smoothly working balances in its inner machinery.

But all the time he is widening the basis for ultimate control. He is just learning to talk and he promptly brings speech into the expanding behavior pattern. He points, not without pride, at a puddle and says, "uh, uh," or "See!" He uses the same word (uh) indifferently for the product of bowel or bladder. Not until some months later will he make a distinction. By way of further verification he sometimes pats the puddle. Patting is characteristic of this age of maturity; he pats his picture book in the same manner. There is nothing portentous in this passing exploitation.

Language assumes an increased role at 18 months. If he is asked whether

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he needs to go to the toilet he can respond with a discriminating nod of his head or a "No." Using his recently acquired word "uh" he can even occasionally ask in advance. Words which are rooted in the child's own experience are instruments of control. He is becoming susceptible to "shaming." He understands when he is asked to get a cloth to wipe up a puddle. He goes on the errand with alacrity. At this age, in contrast to his 15 months response of over-contraction, he now may respond with explosive over-release to toilet placement. He may also report any "accidents."

At 21 months, likewise, his natural tendency is to report, unless he has been unwisely spanked. Such reporting is part of the learning-growing process. He reports or announces not only after but occasionally before. He tells. He is greatly pleased with his successes.

The developmental pendulum is swinging from the contraction phase (withholding) to a relaxation phase. The number of urinations greatly increases. Lapses multiply; and the child calls his mother back frequently after he has been put to bed. To the head of the family it all looks like sheer backsliding. This is the time when father steps in and applies stern punishment. And of all times, this is the worst; for the child is in the midst of a constructive growth transition when he is bringing the opposing functions of sphincter contraction and relaxation into more stable balance (a:b::b:a).

By the age of 2 years these functions are in better equilibrium. The 2 year old therefore shows a definite advance in control. He offers no resistance to routine toilet placements. He definitely tells in advance. He may go to the bathroom by himself and pull his pants down. He expresses pride in achievement, saying, "Good Boy." He is beginning to differentiate between products of bowel and bladder by whatever omnipoetic or other slang the household has adopted. But he is not over-precise,—he may call a puddle "Bad Boy!"

In spite of the definite gains in voluntary control, night fluctuations persist. If the developmental pattern is one of quick shifting he may be dry for two nights, then wet, then dry again for two nights. Or if he is a

"slow shifter" the fluctuating intervals may be two weeks long. These fluctuations themselves are part of a yet further consolidation of gains.

The retention span is lengthening. It may stretch to five or more hours by the age of $2\frac{1}{2}$ years. This is the period when the contraction both of the bowel and the bladder sphincters is in the ascendancy. Girls, who in general are ahead of boys in sphincter control, may wake up dry even after relatively long naps. The child is now learning to stop and to resume in the midst of a micturition. This is a new elaboration. However he still has difficulty in initiating release, he is dependent on the conditioning circumstances of his own bathroom and cannot command his emerging abilities in strange surroundings. He may need verbal props from his mother. But he is consistently advancing; he is more sophisticated, he watches with great interest the elimination behavior of others, including animals.

The *3 year old* as we have so often observed is in focus. Accordingly he is well routinized in his bladder functions. He accepts assistance. Accidents are infrequent. He demands to be changed if they occur. Some 3 year olds sleep dry throughout the night; some even wake up by themselves and ask to be taken to the toilet. Others can be taken up for toileting without being roused out of sleep.

The *4 year old* likewise remains routinized, but he more or less insists on taking over the routine himself. He makes it a private affair, behind closed doors; although he is frankly inquisitive about the same affair in others. He also displays an almost amusing degree of interest in strange bathrooms. He seems to be intrigued by them when he goes abroad. This, after all, is a natural growth symptom. At 2 years he was resistant to or even fearful of strange bathrooms and unaccustomed plumbing.

Although the *4 year old* is blithely self-reliant, he makes errors of judgment, due to his immature time sense, and the low threshold of his voluntary control. The result is that he is often caught in predicaments which produce panicky dismay. The culture might well spare him some of these unpleasant experiences by more thoughtful planning.

The *5 year old* again shows more aplomb. He does not feel the same

childish interest in novel bathrooms; he takes them as a matter of course. He is not so subject to surprise and tension outlets. He sleeps dry; and if he rises at night he can take care of himself. His thresholds are higher; he is not as likely as the 4 year old to suffer lapses with the onset of a cold, or the beginning of cold weather.

Ordinary individual differences and deviations in the acquisition of bladder control are correlated with constitutional differences in thresholds and in modes of growth. The developmental sequences, outlined above, are grounded in the architectonics of the nervous system and therefore should prove useful in interpreting individual deviations. Maturation of the nervous structures does not always advance at an even pace, or one component lags while another goes forward. Some children seem discouragingly slow in training, but on some fine day, perhaps under the stroke of a stimulating personal event, a missing connection is shunted in, and control is achieved with dramatic suddenness. Something has been added; maturation had taken place after all. Having "clicked" these children usually stay controlled.

In other children, control is not so durable. The physiological threshold of their urinary system is low and the tensions of even slight vicissitudes find their outlet through this system. The wriggling and susceptibility which is normal enough in a 4 year old when he is excited, persists into the later school years. These children develop various forms of wetting, which should be distinguished from the serious degrees of clinical enuresis. Simple physiological awkwardness should be considered, before ascribing the weakness to more profound personality disorders.

A small group of boys show related inadequacies in postural and manual control which make it difficult for them to shift from a seated to a standing posture during urination. Hand to mouth reactions likewise were slow, meager, and clumsy. And yet these children may be so fastidious and perfectionistic that their failures prevent them from taking the usual next developmental step forward.

There is another group of cases in which the "slowness in training" is due to specific retardation. These children are intelligent and well con-

stituted emotionally yet they are backward and inept in sphincter control. It is almost as though they were handicapped by a specific disability (like constitutional poor spelling). They may not begin to sleep dry all night until the age of 4 or 5 years. Even after they reach school age their records are chequered. They have a dry period for several weeks in spring followed by lapses in autumn and winter. They organize slowly; but with a tendency toward improvement. They do better at 7 years than at 6 years; and sometimes a fortunate change of scene during holidays brings about a reorientation that may lead to permanent control. Such cases need strategic planning rather than detailed therapeutics. The difficulties so transparently have a developmental origin that they should be guided on that basis.

Indeed the whole problem of bladder control is so charged with developmental factors in normal as well as deviated children, that they should have primary consideration both in interpretation and in treatment. All things considered, it seems that our modern culture still has much to learn from the child himself in this delicate sphere of personal-social behavior. The culture is inclined to be too meddlesome and too emotional. We would not advocate more neglect, although this would often be less harmful; because it would give the wisdom of nature a fuller scope. What we need, instead of neglect, is timely help with a light rather than heavy hand; and above all with a discerning hand. But how can the hand be deft or discerning without a knowledge of the ways of development?

§5. PERSONAL AND SEX INTERESTS

UNDER THIS HEADING we consider a group of problems which concern a very personal aspect of the development of the individual. The problems are complex and are charged with cultural inhibitions. Moreover, certain theories and popular misconceptions of early personality development have invested the whole subject with such portentous implications

that it is difficult to see the issues in proportion. A simple factual statement of the sequences of development as observed in actual children should help to put the problems of guidance in their true light. They are not as portentous as they have been made to seem.

The problems of personal and sex interests in infant and young child are, after all, not essentially different from those which have already been discussed. The principles of development and guidance which apply to sleep, feeding, and elimination apply in precisely the same manner to the patterning of personal-sex behavior. As indicated in Chapter 3, there are no special or unique laws for the organization of emotions. Indeed, so integrated and unified are the processes of psychological growth that an intelligent management of feeding, sleep, and elimination behavior, in itself, almost insures a favorable organization of other fields of behavior. The problems of so-called sex-hygiene may be approached with confidence, and without an undue sense of mystery.

The newborn infant has no personality problems. He is so deeply immersed in the cosmos and the culture which has accepted him, that in his nonage he neither needs nor craves a clear sense of self-identity. But as he grows up he must disengage himself from this universality, and become a well-defined individual. By the time he is five or six years old he must see himself for what he is. There are many stepping stones along the way,—articulate and inarticulate. Here are some of them:

*Johnny,—that's me. * I am I. * That is my mother. * That is my father. * He is a man. * I am a boy. * Susan is a girl. * She has a father and mother too. * I was a baby. * I grew. * I came from my mother. * I am going to get bigger. * I am going to go to school.*

These thirteen propositions cumulatively create the outlook of a school beginner. They make a logical sequence, but they are by no means automatic axioms. They are complicated judgments which the young child has to achieve through the slow and steady processes of growth, aided by experience which sometimes is bitter. Each successive proposition represents one more step in a progressive differentiation which disengages

him more fully from the culture in which he is so deeply involved. Paradoxically this very disengagement also identifies him more fully with his culture; he transforms from a mere ward to a working member.

The process of disengagement entails a continuous reorganization of his emotions. He is "attached" to his mother, to his father, to the household. He feels this attachment vividly when fatigue or helplessness causes him to seek comfort and refuge. Affection has its root in such dependency and protectiveness. But he also feels detachment, particularly when he exercises some new power which gives him a sense of independence. He is driven, as it were, toward two opposite poles: to cling to safety and to emancipate himself from its restrictions. He must at least have enough defiance to grow. Normal emotional growth requires a proper balance of affection and of self-reliance.

But, as already suggested, his developmental task is not simply emotional; he must achieve judgments as to his place in the social scheme, he must identify himself as one kind of person, his mother as another kind, his father as still another kind. He must distinguish between parent and child, between male and female, between senior and junior, between conformance and defiance. *These judgments, although strongly tinged with personal emotions, are essentially intellectual. They require perception, discrimination, and intelligence.* It is this part of the story which needs emphasis, for here lies the key to understanding and successful guidance.

At 4 weeks of age, the baby's face is generally impassive. By 8 weeks it breaks into a spontaneous social smile at the sight of another person's face. Whether at that moment he is more conscious of his interior smile or of the external face, might be debated. In any event, this double reference is at the basis of the child's socialization and personalization. At 16 weeks the social smile is spontaneous or self-induced.

By 28 weeks he already reacts differently to a stranger's face. This discrimination shows that the development of complex personal perceptions is already under way. He has already made an elementary distinction,—a personal-social judgment.

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By *40 weeks* or a year he has made significant advances in self-discovery. Whether sitting up or lying down, his arms and hands now have more freedom of movement, and he uses them to explore his own physical self. At 16 weeks they were at his mouth; at 20 weeks they engaged above his chest. Following the head to foot trend which is characteristic of development, the hands at 40 weeks (and later) come down to the thighs. Just as he used to indulge in mutual fingering, he now makes contact with his genitals when not clothed. Ordinarily his exploitive manipulation is a more or less transient event in the course of his physical self-discovery.

In the period from *1 to 2 years* there is an increasing amount of social reference. Although the infant-child is capable of long stretches of self-absorbed activity, he is also given to numerous social advances which are the charm of this age period. He extends a toy to a person; he holds out his arm for the sleeve; he says "ta-ta"; he hands the empty cereal dish to his mother; he tugs at her skirt to bring her to an object of interest; he asks for food, drink, and toilet; he echoes back the last two words of conversation. By all these tokens and devices, he builds up a vast body of specific perceptual experience which ultimately enables him to draw the momentous conclusion that there are other persons in the world more or less like himself. The urge to discover these persons is a growth phenomenon. It shows itself in various personal and sex interests which follow in natural sequence.

This discovery of other persons is of such great magnitude that it must come piecemeal, and gradually, otherwise he might be overwhelmed. Even so he seeks increased refuge in giving and receiving affection. He is willing to be called darling; he will spurn it later. He is willing to be held by the hand; he will refuse it later. He likes to nestle on occasion in his mother's lap. (She may remember this period as the time when he used to be so much more affectionate than he is now!) The stern fact is that affection is related to the varying balances of security and insecurity. For example, at 18 months, he seeks and shows affection when he suffers from the physical (and mental?) discomfort of having wet himself. At about 21 months he grows more tender toward the end of the day. He expresses

affection by kissing, particularly at bedtime. Children are affectionate by nature, but the amount, the times, and the depths of their affection vary with the necessities of development. Affection is not a diffuse, general trait, but it is a structured network of attitudes, shaped within a total growth complex. We must be prepared to see changes in its structure as the child matures.

Two years is a transitional period when the child both clings to moorings and cuts from them. *Johnny* is his name, and in his inarticulate psychology, the spoken word *Johnny* which he hears is nothing more or less than he himself! His name is *Johnny* as a person.—He will soon use the pronouns *you*, *me*, and *I*,—a further indication of a fundamental change in the psychology of his self. But he still refers to himself by name (*Johnny*) rather than pronoun, and if one wishes to secure his *personal* attention it is advisable to address him by *Johnny* rather than *You*. All of which proves our thesis that we are dealing with a complicated growth process,—the growth of intricate perceptions.

The *2 year old* thinks that all the world is peopled with “mommies” and “daddies” and that all the children are “babies.” This flight of generalization does him no little credit but he has much more to learn. He has to differentiate between *the* mommie and *a* mommie. He also has to make a sharper distinction between his mother and his father. In the natural course of household events he has observed differences in their clothing and their methods of toileting. His early distinctions of sex are based on dress, hair style, and possibly voice.

At about the age of $2\frac{1}{2}$ years, having acquired more comprehension of his own urinary functions, he is interested in the difference between boys and girls, in their mode of micturition. This might be called a genito-urinary interest, because that is the point of departure, and it leads to a new awareness of genitalia in self and others.

Now the keenness and suddenness of that awareness will depend upon several factors: the age and sex of the child; the child's temperament; the presence or absence of brothers and sisters; the bathroom and beach folkways of the household in which he is reared. These folkways vary

tremendously in our American culture from extreme modesty and deception to indiscriminating lack of reserve. The latter can scarcely be recommended from the standpoint of the guidance of growth. If the parents note undue interest and extreme awareness at this age, it is wise to graduate the experiences of the child to his capacity to assimilate them. It is not a question of concealment, but of commonsense adjustment, particularly to the needs of over-sensitive or over-susceptible children.

The $2\frac{1}{2}$ year old child has a more vigorous sense of self. He says *I want. I need.* He is negative as well as positive. He says, "I don't like." He can state his own sex by negation: "No, I'm not a girl."

Inasmuch as this is a nodal age, the organism is in sensitive equilibrium. Nature must check and countercheck. If his sense of *I* and his will to power waxed too strong he would go off on a developmental tangent. Besides, his sense of *I* needs content. A full sense of *I*-ness demands an appreciation of the biographic *I* in which the present $2\frac{1}{2}$ year old *I* had its origin. Accordingly he becomes spontaneously interested in his own infancy. Nature provides for his instruction in a charming way. She has this budding child relive his babyhood. Through question and answer, pictures and stories, he is enabled to relive in short scenes and acts the infantile parts which once he played. For even he has a past. The revival of that past consolidates his sense of self, gives it substance, and even flatters it with a feeling of superiority; for he is no longer a baby like that!

Such reliving seems to us not a backwash of regression, but a method of growth. It takes on ominous import only in the over-sensitized child who lingers too long in the retrospect, and whose constitutional style of growth is so deviated that he shows similarly faulty mechanisms along the whole course of maturing. It is not abnormal for a child, say 33 months old, to wish to be carried as though he were a baby. It is a passing phase, part of the dramatic recapture of the infancy now being superseded.

Even by the age of 3 years, the child has attained a well-balanced sense of self. He has no marked preference for either sex, although earlier he may have shown a fixation upon one sex in a manner suggestive of a possible temperamental trend. He knows his own sex with assurance. His

interest in human anatomy remains strong; he talks freely and naturally about differences which he has observed. He has a rather catholic although fragmented interest in the structure of family life. He wants a baby in somewhat the same way in which he wants a tricycle.

By the age of $3\frac{1}{2}$ years questions about marriage begin. Both boys and girls show an intellectual interest in brides! (Bridegrooms and fathers scarcely figure at all in the marital interests of the next few years!) Weddings are vaguely explored in questions and dramatic play. Children, more or less regardless of sex, propose marriage to their fathers and mothers.

An articulate child of three or so may ask where he was before he was born. He may ask other questions which seem to bear very profoundly on the origin of babies. In reality the questions are usually not deep. Extremely simple answers satisfy his rather fragmentary curiosity. His mind has just thrown out a pseudopod: he is not absorbed in the eternal verities. He wants an answer that makes sense for *him* and not for you. To find out what makes sense for him, counter with a few naive questions of your own. His naive answers will indicate how you may shape your replies. You are guiding his growth. This is not the time to get out a picture book on Life and its Origin, which "explains" the whole story from Genesis to Exodus.—We shudder to think that even at the age of five he may be called to sit in a circle at the feet of the Kindergarten teacher who, book in hand, will make it all plain!

Even the blithe and boisterous *4 year old* is none too ready for complete information. On occasion, with bravado, he would like to be a man of the world; but he really is still closely bound to his mother. He cites her as authority in cases of dispute. MY mommie says so! He will, therefore, believe her if she tells him how babies are born; but for the time being he would almost prefer to compromise on the fiction that the baby was bought at the hospital, and that it cost money (which lessens the fiction!). One reason why he is intellectually satisfied with such a fiction is that his imagination and comprehension do not include the selling side of transac-

tions. He is not interested in selling as such. Temporarily, on account of his immaturity, he understands buying, but not selling.

We do not cite this fact in order to recommend a fiction, but rather to suggest how precisely the maturation of the child determines the effectiveness of instruction and guidance. A child whose comprehension is so neatly delimited that he understands only the buying part of a two-way market transaction, may well not be ready for the whole story of reproduction. He has, nevertheless, some interest in growth, including the period of prenatal growth. He likes to weigh and measure himself and by dramatic gesticulation to boast how he is getting bigger and bigger.

Indeed, the mental organization of the 4 year old is somewhat fluid. He is quite likely to worry about how the baby "gets out." He may spontaneously decide it is through the navel. The navel is an enigma to him, and may become the focus of his modesty and secretiveness. If he is given to exposure, it is the navel, as well as genitals which he exposes. His urinary function, it will be recalled, tends to show some instability. Under the excitement of being in a strange house, he asks to go to the toilet. Under stress he tends to grasp his genitals. The urogenital-system is a frequent tension outlet at this age.

Between 5 and 6 years the child again comes into developmental equilibrium and focus as he did at 3 years. He does so at a more sophisticated level. He has lost some of the sophomoric traits of 4 year oldness, and has more sense of status and propriety. He has a better appreciation of the folkways of culture. He shows the conservatism of youth in deferring to them, and citing them to his parents for their consideration. He does not want to be different from humanity. Boys and girls alike at this age talk freely about having babies of their own (without making any reference to marriage or the father's role). They also ask their parents directly for a brother or a sister.

* * * *

And so the spiral once more comes to a full turn. By slow and not altogether painless stages the 5 year old has achieved the thirteen sequential

judgments which register his cultural maturity. He has even foreshadowed a fourteenth judgment which vaguely prophesies that when he grows up he will be a parent as once he was a baby.

But this is no time to say "Presto, we shall now tell him all the facts of life!" Children learn these facts in terms of circumstances, contexts, and contingencies, many of which cannot be foreseen. The child needs a background and a frame of reference for acquiring more knowledge. There is some point in the warning of "too little and too late." But there is also danger in "too much and too early." Specific guidance should be adjusted to the child's ability to assimilate.

Now it happens that from some apparently instinctive logic, children have a sense of hierarchy. Almost always the older child behaves as such toward a junior. Nearly all children are interested in babies. This is the matrix of their personal and sex curiosities. But this interest should not be imposed upon. A 2 year old may look on entranced while he sees a baby nurse at the breast: but he may project himself too tensely into this situation, and over-react. Such over-reaction may be avoided if his immaturity is not imposed upon. This holds true of all of the "crises" which we have recounted for the first five years of life. These crises are handled successfully by the great mass of normal children. There are a few children who show a strange lack of interest in life origins and in sex, even at the age of seven or eight years. Wise parents may plan simple circumstances which will bring the interest into focus; but the interest cannot be imparted. The impulse must come from within the child.

The greatest source of serious deviations in this field of personal-social behavior is the oversensitive child in combination with an overzealous parent. This leads to overawareness on both sides. The patience and moderation of a normal developmental tempo are sacrificed for the purpose of outwitting development. The policy of excessive, ill-timed frankness creates difficulties instead of solving them.

Perhaps there is something to be said, after all, in favor of certain reserves between parent and child,—to say nothing about the cultural reserves which amateur anthropologists too glibly designate as taboos.

THE GROWTH COMPLEX

Intelligent reserve has its place in our relations with children. It lies at the basis of courtesy and deference. It demands an acknowledgment of the sequences and the logic of development.

* * * *

A *Tabular Summary* of the sequences of development which have just been considered is presented on the following three pages. The sequences are listed in two parallel columns to emphasize the close correspondences between the growth of the *personal-social self* and the growth of the *differentiations of the self and other selves*. This is primarily a process of perceptual organization. It is a process of self-discovery in which the child relates what he perceives in others to what he knows concerning his own self. The identification proceeds reciprocally from these others to self and self to others. At first the identification is limited to hands and face, later it takes its departure in the organs and functions of elimination, and then goes into the historical part of the self, namely, the child's own babyhood. All this perceptual and emotional organization is part of a total unitary growth complex. There is no evidence that the specific sex factors are all determining. To appreciate the full implication of the tabular summary it should be read both vertically and transversely from column to column.

The table also has practical uses. It suggests how much a child is likely to understand at a given stage of development. This may help the parent to determine how much needs to be told to the inquiring child.

COMPARATIVE GROWTH SEQUENCES

<i>Personal-Social Self</i> (Individual and Inter-Personal Status)	<i>Differentiation of Self & Others</i> (Elimination—Sex—Babies)
8 weeks	
Social smile at sight of another person's face	

PERSONAL AND SEX INTERESTS

Personal-Social Self

(Individual and Inter-Personal Status)

12 weeks

Regards own hand
Vocal social response
Knows mother and recognizes her
Enjoys evening play with father

16 weeks

Fingers his own fingers
Spontaneous social smile

20 weeks

Smiles at mirror image
Cries when someone leaves him

24 weeks

Smiles and vocalizes at mirror image
Discriminates strangers

28 weeks

Grasps his feet
Pats mirror image

32 weeks

Withdraws from strangers

36 weeks

Responds to his own name

40 weeks

Waves bye-bye and pat-a-cakes

44 weeks

Extends object to person without release
Again withdraws from strangers

52 weeks

Gives object to another on request

18 months

Hugs and shows affection toward doll or
teddy bear

Differentiation of Self & Others

(Elimination—Sex—Babies)

40-52 weeks

When clothes are off, handles genitals.
This may be the onset of masturbation
in a few girls but this is rare
When urinating, girls look at their moth-
ers and smile
Fusses to be changed when wet or soiled

18 months

Affectionate toward mother when tired,
in trouble or if pants are wet
No verbal distinction between boys and
girls

THE GROWTH COMPLEX

Personal-Social Self

(Individual and Inter-Personal Status)

21 months

Calls all other children "Baby"

24 months

Can call himself by his own name

Calls all men and women "Mommies" and "Daddies"

27 months

Says: "I want"

30 months

Calls self "I" and has an increasing sense of "I" especially in relation to immediate abilities

Defines his sense of "I" by his very imperiousness

Calls other people "You"

A few, who have a slowly developing awareness of self, confuse "I" and "You"

Calls women "Lady" and men "Man" as distinguished from mommy and daddy

Calls other children "Boys" and "Girls"

Knows he is a boy, like father and that he is different from girls and mothers (and vice versa)

Says: "I need," "I don't like"

33 months

Relives his babyhood verbally. May even want to be a baby

36 months

Sense of "I" increasing

Combines self with another in use of "We"

Can tell difference between boys and girls but makes no distinction in his play

Says: "I like"

42 months

Beginning of temporary attachments to some one playmate often of the opposite

Differentiation of Self & Others

(Elimination—Sex—Babies)

24 months

Kisses at bedtime

Unable to function in strange bathrooms

Distinguishes boys from girls by clothes and style of haircut

30 months

Conscious of own sex organs and may handle them when clothes are off

Interested in watching others in bathroom or when they are undressed

Distinguishes boys from girls by different postures when urinating. Notices these differences but does not verbalize them

Beginning of interest in physiological differences between the sexes

Inquires about mother's breasts

Non-verbalized generalization that boys and fathers have a distinctive genital and stand when they urinate; girls and mothers do not

36 months

Verbally expressed interest in physiological differences between the sexes and in different postures for urinating

Girls make one or two experimental attempts to urinate standing up

Desire to look at or touch adults, especially mother's breasts

Expresses a general interest in babies and wants the family to have one

PERSONAL AND SEX INTERESTS

Personal-Social Self

(Individual and Inter-Personal Status)

sex. Girls are more often the initiators of these attachments
Interest in marriage and marrying. Proposes to parents and others
Says "I love"
Interchange of parent-child role
Imaginary playmates
Child plays the role of animals

48 months

Expanding sense of self indicated by bragging, boasting and out of bounds behavior
Tendency in play groups for a division along sex lines, boys playing with boys and girls with girls
Beginning of strong feeling for family and home
Exhibits some self criticism

60 months

More secure in sense of self. No longer brags

Differentiation of Self & Others

(Elimination—Sex—Babies)

Asks questions about babies: what can the baby do when it comes; where does it come from; where is it before it was born
May not understand answers mother gives that babies grow inside the mother
Asks where he was himself before he was born

48 months

Under social stress grasps genitals and may have to urinate
Extremely conscious of the navel
May play the game of "show," either exposing genitals or urinating before another child out of doors
Verbal play about elimination and calling names such as, "You old bowel movement"
Interest in other people's bathrooms; demand for privacy himself but extreme interest in the bathroom activities of others
May believe mother's answers as to where babies come from but may cling to the notion that they are purchased
Questions about how babies get out of the mother's "stomach." May spontaneously think that the baby is born through the navel

60 months

Marked interest in anatomical difference between sexes is often dropping out
Questions as to how babies got in as well as how they will get out of their mother's "stomachs"
Interest in parents' babyhood; in having a baby brother or sister; and in having a baby himself when he grows up (boys as well as girls)

THE GROWTH COMPLEX

Personal-Social Self

(Individual and Inter-Personal Status)

72 months

Beginning of value judgments about his own behavior; setting up standards for himself

Differentiation of Self & Others

(Elimination—Sex—Babies)

72 months

Boys may ask factual questions about their testicles

Factual questions about having a baby: does it hurt?

May be the beginning of slight interest in the part the father plays in reproduction

§6. SELF-ACTIVITY, SOCIALITY, SELF-CONTAINMENT

THE GROWTH complex never stands still. It is comparable to an ever-moving stream,—a very intricate stream full of currents and cross currents, eddies and pools, and yet a stream which manages to carve itself a channel and to reach a destination. Should the stream congeal, life itself would stop. The currents within the stream have their checks and counterchecks. At times the flow may slow down as though to gather force for an onrush, which in turn slows down.

Or the growth complex is comparable to a complicated melody, of varying tempo, with crescendos, diminuendos, legato, staccato, turns and inverted turns. In spite of momentary disharmonies, the melody has structured form and moves forward with more or less rhythmic pauses.

In the previous chapter (page 293) we described the phenomenon of *recurrent equilibrium* which is characteristic of the psychological growth of infant and child. The organism makes a forward thrust at its growing margin, producing new patterns of behavior. These innovations are then integrated into the total action system; there follows a period of relative equilibrium, followed in turn by another forward thrust: *Innovation—integration—equilibrium—innovation—integration—equilibrium—innovation* Such seems to be the formula of growth, for separate areas of behavior and also for the entire organism over a period of time.

The culture somewhat heedlessly (not to say ignorantly) tends to insist on a continuous state of equilibrium in the child. This leads to aggravations of all kinds, because it is contrary to an insuperable mechanism of development, whose laws are written in three part rather than one part time.

It is helpful, therefore, to think of the growth complex in terms of opposite trends which counteract each other, but which are so skewed that they are progressively resolved in recurring phases of relative equilibrium. The developmental stream keeps flowing onward, seeks an optimal channel and finds it. A discerning culture can ease the tensions and ebullitions along the way.

To some extent *self-activity* and *sociality* are opposing tendencies. Nature through maturation, and Culture through guidance brings these tendencies into balance and proportion. Excessive self-activity would make the child an isolationist. Excessive sociality would lead to extreme conformance. There is an intermediate state of equipoise and equanimity in which the child realizes a maximum of equilibrium. This is the state of self-containment. It is a relative state and it is transient; but it is also recurrent. Each recurrence marks a higher stage of maturity and a wider base for the expanding pyramid of personality.

Since we are nearing the summit of our climb through this volume, let us look back on the panoramic scene and locate, if we can, the areas of recurrent equilibrium. Conveniently they tend to coincide with ages which have been delineated in the behavior profiles: 4, 16, 28, 40 weeks; 1 year, 18 months, 2, 3, 4, 5 years. These are key ages for the interpretation of the growing child. The intermediate ages give many evidences of developmental innovation and disequilibrium. The 2½ year old level is peculiarly instructive for this reason.

In the panoramic survey which follows, it must be understood that all normal children do not show with equal definition the recurrent phases of self-containment and of readjustment. Constitutional differences reflect themselves in this very respect. Some temperaments show considerable imperturbability throughout. Others seem never to be in prolonged

states of tranquilized equilibrium. However, the broad trends which we shall now trace are characteristic of human growth. The sequences are significant. The age designations are naturally approximate. Having made ample qualifications, we shall stress the periodicity of disequilibrium and self-containment as a function of the patterning of behavior in infant and child.

Compared with the irregularities of the early neonatal period, the behavior status of the *4 week* old infant is stable and coordinated. He shows less stress and struggle in his brief waking hours. But at 6 or 8 weeks he displays a new kind of discontent in his evening crying, as though he were making a groping thrust for some new experience. He is less self-satisfied. He apparently wants some social contact. His responsive smile on sight of a face will prove to be a partial fulfillment of this vague striving. The culture does not always know just what to do for the baby in his obscure fretting innovations. But even so he incorporates new experience into his action system, and some fine day at about *16 weeks* of age he basks for a while in self-containment.

Gone are the indistinct strivings and frettings. He smiles spontaneously. His postures are symmetric. Tremors and startles are rare. He brings his hands competently and comfortably to his mouth. Confusions are gone. His oculo-motor muscles are under improved control. He can look and hold at the same time. He is content with the self-activity of mutual fingering. He enjoys his caretakers; beams alike on father or mother, laughs aloud for personal as well as social reasons. All things considered, this is a period of self-containment. For the time being the culture has less perplexity. In his self-activity and sociality he seems to know what he wants and he is getting it.

But naturally, this is a passing phase. In another month there are evidences of transitional disequilibrium. He begins to discriminate strangers. He is sensitive to brusque changes. He cries when someone at whom he has been looking suddenly disappears. The householders can no longer drift in and out of his room as they used to in the good old days of 16 weeks! The baby now has tiny timidities associated with his new powers

of perception. He would like to sit up and be sociable but he is not quite equal to combining his self-activity with sociality. Even on his stomach he may not be content. He would like to get into a low creep position, but he has (to us) amusing difficulties in coordinating his fore and hind quarters. Such faulty coordination is a symptom of developmental disequilibrium.

But in accordance with Nature's blueprints all these difficulties will be resolved in the fullness of time,—indeed at about the age of *28 weeks*. The 28 week old infant presents a classic picture of self-containment, whether supine, prone, or seated. He can combine his perceptual and prehensory abilities with the posture at his disposal. He can look, manipulate and smile all at one time. Anything satisfies him as a toy. He makes friends easily. He can be handed from one lap to another with impunity and without warning. (What equanimity!) He can play contentedly by himself. Or he can alternate between solitary and interpersonal play, between self-activity and sociality, with the ease of a virtuoso. He is so harmoniously and amiably constituted that culture has a breathing spell which coincides with his developmental equilibrium.

At about 32 weeks the smooth waters begin to ruffle again. He loses his postural aplomb. He strives to sit without the support he formerly accepted; he strives to go from the sitting position to prone. He gets caught in awkward positions and entangled with himself in his crib (Culture has to intervene to disentangle him.) He has a fear of strangers. He gets too excited by social contacts and cannot readily shift from sociality to self-amusement. In the prone position he is more likely to go backwards than forwards. Life is not as simple and straightforward as it used to be.

But at *40 weeks* sailing is again smoother. In prone he can now creep forward and secure the object which formerly only baffled him. He can sit alone. He can pull himself to the thrilling heights of standing. He can play alone, combining objects ad libitum and exploiting them with fine motor coordination. For the first time in his eventful life he can correlate gross

postures, fine motor control, and social behavior. He is contented in his pen. He enjoys a rich though temporary measure of self-containment.

In another month or two he displays new fears which so often accompany new powers. He becomes frightened at some of his own self-activities; he may be terrified of his new loud sounds. He is frightened by strangers, particularly if they touch him. He has a fear of the doctor's office. Such timidities remind us of the difficulties previously detailed (§5) which the child encounters in making valid differentiations between himself and other selves.

When he is in equilibrium these difficulties do not trouble him. This is the case at *1 year* of age, when he maintains a delightful rapport and easy give and take commerce with the household. His action system is in such nice balance that he is ready for almost any two-way nursery game. He likes to-and-fro play, in which there is a reciprocating social and self-reference. He likes it over and over again, for when a top is in fine balance why should it not spin round and round and round again?

At *15 months* this circularity gives way to tangential and propulsive behavior. He has become a biped. He likes to dart and dash. He has a great propensity to cast objects, heedless of their destination. (At 1 year he liked to have the objects stay in an orbit so that they would return to him.) This is a dynamo stage, a uni-directional stage. As yet this active baby is capable of starting but not of stopping. From a cultural standpoint he is not in equipoise. He needs constant shifts and assistances, unless he is confined by chair, crib or pen. Outdoors he takes free rein. He is at extremes rather than in even balance. Culture has to anticipate and plan for his dogmatic one way tendencies.

At *18 months* he is still very active; but he has himself in better hand. He has become more of a person, who can be easily trafficked with on his level. To be sure, he can wear out his mother with the exactions of the daily routines, but otherwise he accepts almost any stranger as companion on his excursions. He is so self-sufficient that he will play by himself for two consecutive hours. He manipulates things with competence and assurance. Persons do not give him undue concern. Consequently he

shows a high degree of self-containment, in spite of his mercurial bumbling demeanors.

At *21 months*, with his increase of maturity, he comes into a new awareness of persons again, and with it a fear of strangers. He clings closer to the familiar adults of the home circle, his adjustment to nursery school weakens and wavers. He has a new sense of ownership of things which complicates life for him, because the culture is rather blind to the patterns by which he manifests his rudimentary possessiveness. He has poor command of words, but he has much to say so he "bawls" in what is said to be a most unreasonable manner. He may also speak with temper tantrums. In some ways his behavior is reminiscent of an older deaf child who likewise is so often misunderstood, and in a similar manner. He lacks, moreover, a flexible command of time and space relationships which makes him cleave to routines. He is not equal to reorientations. No wonder he lacks equipoise.

Now the *2 year old* is in better equilibrium, with a less precarious orientation in time and space. He adjusts more completely to familiar places, including a nursery school. He is more at home with himself, content to play quietly in smaller spaces and with smaller objects. He is capable of parallel as well as independent play. Indeed he enjoys it and is content not to disrupt the play of other children. He is not excessively dependent on his mother, but he likes to have her around and greets her from time to time with an approving smile. He is emotionally attached to her but not over-dependent on her. He is self-contained.

But in another semester this composure all but vanishes; for he is then *2½ years* old. And this age is distinguished for its dramatic manifestations of unsettled equilibrium. If 28 weeks affords the classic example of self-containedness, 30 months is the classic example of its polar opposite. It is almost as though the pyramid of personality were trying to rest on its peak rather than on its base, and therefore wobbled on the slightest provocation or no provocation at all. In our behavior profile of this age we listed some of the numerous and diametric opposites which struggle for mastery within the child's complex action system. If like the fabled don

key and the haystacks, he were precisely at the middle point between all these opposites he would be the essence of neutrality; but he is just enough off center to be the epitome of double contrariness and disequilibrium. What he wills to do he can't; what he can do he won't. Yes and No, Affection and Resistance, Running-away and Clinging, Holding-on-too-hard and Giving-up-too-easily, Whispering and Shouting, these and a host of other opposites alternate with such poor timing that the child is neither at home with himself nor with his environment. And the culture is often out of gear with him as well.

He is not sure of himself. His salvation lies in his routines. These are his old and established self. These he has mastered. Accordingly he insists on them with spirit and with repetitiveness. He converts them into life-preserver rituals. Being in the midstream of a growth transition he has a very small margin of tolerance; *but he has a little*. It is a 'wise culture which recognizes how little and concedes the rationale of the ritualism. However by utilizing the small margin of tolerance the ritual is varied gradually. It loses its vitality (to the parents' relief) when it has lost its necessity.

Lo and behold, this same child in another semester, at the age of 3 years, may become a paragon of self-containment. He has recaptured the power of choice through his winning battles with the warring opposites. He is sure of himself. He is emotionally less turned in on himself. With his widened margin of tolerance he has a fund of good will for mankind. The culture can bargain with him on even terms. He is at home in the domestic circle, at nursery school, on the playground, at a picnic down the river. He has flexible personal relations with his father, as well as mother, as well as with other children. Self-activity and sociality are well apportioned. He takes his routines sensibly. He uses his behavior equipment in culturally acceptable ways. Or more precisely, he has an effective behavior equipment because, for the time, he is in good working equilibrium. The rest follows.

But it does not endure. For in yet another semester, at the age of 3½ years, there are new growth signs of unsettledness. Even his general motor

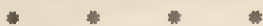
control, which one might well think would be by this time stabilized, betrays signs of weakening. His penciled strokes waver; his voice quavers; he is prone to stutter. He overcomes the tendency to vocal tremor by speaking in loud high pitch. He gives vent to his motor tensions in endless scrubbing and rubbing activities. His inner life of phantasy betrays stresses and insecurities. He has many fears. He may dread deformities and darkness. Dreams multiply and intensify. He spends hours and days with imaginary playmates. In dramatic fancy he exchanges the roles of parent and child. He becomes the parent. He may trot about all day in the privately impersonated role of a horse or dog. He takes this role seriously. He wishes the culture to take it seriously too; he will extend his paw but not his hand. And when he shouts, "Don't laugh," some heed should be paid, for these are developmental devices whereby he, almost without the aid of culture, initiates himself into the complexities of culture with its manifold human relationships. Imaginary roles like more infantile rituals are scaffoldings for emerging patterns of social behavior.

The *4 year old* is already a more patterned person with increased savoir faire. He has, as once before noted, a fluid organization, but he is in relatively stable equilibrium. This fluid organization spreads in all directions and includes with almost equal force all fields of his behavior. The expanding periphery pushes across frontiers and thus his horizons are widened. His fine and gross motor control has greatly improved. He is no longer fearful of the high rungs of the gym as he was a half year ago. He is well oriented to his family. He likes nursery school and wants to attend every day. He is capable of sustained cooperative play. He is sensitive to the hints, the commissions and the commands which come from his culture.

But once more six months of added maturity bring about a difference. The *4½ year old* child tends to go out of bounds. He is as it were pushed out of bounds from the unregulated momentum of his expansion into widening horizons. He tells tall tales. He boasts. He shows off. He stands on his head. Inwardly, however, he is not so brave or composed. He has his fears, symptomatic of another transitional stage of disequilibrium

which inevitably produces insecurity. He dreams of wolves. He is afraid of jails. He is afraid of the red traffic light, which means danger to him. He is afraid of the policeman who is perceived as a threat rather than as a patron of protection.

The 5 year old, on the other hand, has so matured that he sees the policeman in his truer light, both as a mentor and as a guardian. This added mite of maturity brings with it a more catholic outlook, an ability to see two sides and to weigh them proportionately. The 5 year old has a much more balanced awareness of himself in relation to other persons. He is conscious of differences in hierarchy and prestige. He accepts the social scheme. He goes to and from kindergarten like an embryo citizen, as indeed he is. We need not celebrate his virtues again. He has completed the first long lap on the pathway to maturity.



It has indeed been a long journey marked as we have now seen by a succession of phases of recurrent equilibrium with intermediate stages of relative disequilibrium and readjustment. The whole purpose of this chapter has been to bring these almost rhythmic alternations of readjustment and self-containment into sequential perspective. The interludes and the transitions are all but meaningless if they are regarded as separate episodes or fortuitous variations. They have a profound logic when viewed in the continuity of the single, biographic growth career. They show that everything which the infant or child does has a functional or symptomatic significance in the economy of development. Nothing is sheer nonsense, sheer devilry, or sheer obstinacy. Every patterned action must have a rationale in the physiology of development. Growth as a process is as lawful as metabolism, digestion, respiration, secretion, or any living process. It is in fact the sum of all the living processes of the organism. And when we are concerned with nothing less than the growth of a human personality, this all-inclusive process is the greatest challenge to culture. The culture did not create this process, but it determines its products,—within the limitations of the law of recurrent equilibrium,

and all other laws of development. That there is an element of recurrence in this equilibrium should give all parents and all philosophies a modicum of optimism.

* * * *

One more glance at the panorama. Let us look not on the developmental stream but on the cultural landscape. We then see that during these first five years the child has steadily penetrated into the cultural milieu and thereby has widened his physical horizons as well as his psychological orientations. With each expansion he has formed a new niche. His first translation was from uterus to bassinet, and then in quick succession from bassinet to crib, to high chair, to pen. The pen itself has its gradients. At first it is in the living room with mother nearby. Stage by stage it migrates into the playroom, onto the porch, and into the vast space of the yard. As the child draws closer to the civic community the pen is moved to the front yard. Further excursions are made by perambulator and stroller and velocipede. More formally the excursions may take him across the threshold of the nursery school, at first on one or two days during the week, later thrice, later daily. At 5 years he is able to attend the kindergarten, usually without escort. He has almost graduated into member status in the community. These gradations reveal the stage by stage progression of the complicated process of acculturation. Each stage is dependent upon an increment of maturity in the behavior equipment of infant and child.

CHILD DEVELOPMENT AND THE CULTURE OF TOMORROW

PARTLY BY WAY of epilogue, we venture in this concluding chapter upon a very spacious theme,—the changing status of the child in a culture which is destined to undergo profound reorientations with the termination of the war. It is a war of peoples, and there is every prospect that the protection of child development will be increased and enriched during the period of reconstruction. Something will be learned from the aftermath,—from the uncounted children whose physical and mental development was impoverished and maimed. But ultimately more will be learned through a rededication of science to a fuller study of the normal sources of life and human growth.

It is being said that one aim of the peace must be to so reorder the world that another apocalypse of violence will not be necessary. How can this be done except by a profound, socialized reaffirmation of the dignity of life as it is embodied in infancy and childhood?

Perhaps the most ameliorative social force that can be released in the years of reconstruction which lie ahead is an intensified conservation of the development of infants and young children. They are the carriers and sources of life. This must be a socialized conservation which will be felt and effected by the masses as well as by the medical world and by political leaders and educators. A heightened solicitude for the early years of human growth will not only have a therapeutic benefit for the adult inheritors of the aftermath; it must be the basis for all prophylaxis of war. For how can we ever overcome systematic destruction of life, if life and growth are not cherished at their source?

§1. A SCIENCE OF CHILD DEVELOPMENT AS A CULTURAL FORCE

SOCIALIZED CONSERVATION will need all the resources of the life sciences, as well as new visions of cultural welfare. It will be the task of science to define more clearly the limitations of culture as a determinant of human behavior. The anthropologist sees in living cultures, in spite of their apparent diversity, a pervading sameness, arising out of common traits of human nature. This quality of sameness denotes underlying psychological laws which should enable us better to understand ourselves and our cultures, including religion, morals, mores, child care, and government. Thus also we may arrive at more insight into the diseases of culture as manifested in poverty, economic crises, crime and war. It is not strange that cultural anthropology claims to be the very basis of social science. But scientific anthropology, no less than psychology, is inextricably bound up with physics, chemistry, physiology and biology. Culture began with a very primitive man whose descendants have not lost all his primitiveness.

The culture of tomorrow will begin and always begin with the development of individual infants and children; for, as Malinowski aptly said, culture is nothing but the organized behavior of man,—“a large-scale

molding matrix, a gigantic conditioning apparatus. In each generation it produces its type of individual. In each generation it is in turn reshaped by its carriers."

Now, however, more than ever before, it is necessary to understand realistically the limiting factors in this conditioning mechanism. They are growth factors. They are the laws of child development. Indeed, it might be well to reserve the term matrix for the maturational mechanisms which literally establish the basic patterns of behavior and of growth career. A matrix is that which gives form and foundation to something which is incorporated, in this instance, through growth. By growth we do not mean a mystical essence, but a physiological process of organization which is registered in the structural and functional unity of the individual. In this sense the maturational matrix is the primary determinant of child behavior.

This process of organization, as a life process, is infinitely older than human culture. It is so ancient that man shares it with plants and animals. Darwin grasped the unity of a world web of life. His passionate genius reduced the vast reaches of the evolution of the human race to a comprehensible order; but he left unsolved the great problem of man's capacity to carry the cultures which he creates.

This brings us back to the basic problem of environmental conditioning,—the relationships between maturation and acculturation. In the heyday of behaviorism it was seriously suggested that "almost nothing is given in heredity" and that practically the whole psychology of the child is built in by the mechanisms of habit formation and the conditioned reflex. Such an extreme theory of human development explains too much. It explains, of course, how totalitarian systems of education and government can mold their subjects to a pre-conceived model. But it does not sufficiently explain how this molding process also fails, and why an inexorable spirit of liberty defies it. Surely it has now been demonstrated that any culture which has an overweening confidence in its own authority over the individual endangers the collective sanity. Even the most

highly technological civilization cannot survive unless it is compatible with laws of human behavior and organic growth.

For these reasons, the culture of tomorrow will be dependent in no small measure upon adequate sciences of child development and of human behavior. There will also be profounder spiritual insights, but even these must reckon with the laws and limitations of human nature, as embodied in infants and children. Symbolic concepts which oversimplify the intricate problems of good and evil can, alone, no longer suffice as goals and guides. We need a much more penetrating knowledge of the mechanisms of mental development and motivation. Our present-day knowledge of the personality of infant and child is extremely meager and fragmentary. Science can and will in time supply a fuller understanding. And this understanding will have a refining and humanizing effect upon the culture itself. Or shall we say that such science generously expended is an expression of an improving culture?

§2. DEVELOPMENTAL SUPERVISION AND GUIDANCE

ASSUMING then that an abundance for peacetime life has been restored and that the four freedoms prevail, how may a technological civilization foster the fuller development of its infants and children? Without attempting precise prophecy a few possibilities can be suggested.

First and foremost, there will be a remobilization of medical and biological science directed toward the measurement and elucidation of individual development from infancy through adolescence. The already brilliant achievements of chemotherapy and immunology indicate yet greater applications in the universal field of nutrition. The diagnosis of biochemical and bioelectrical conditions in infant and child will lead to dietary controls which will augment strength, stamina, and emotional well-being. In many ways this area of control may prove to be the most influential. But it cannot displace the mechanisms of growth and genera-

tion embodied in the laws of heredity. Nor can it supersede the inborn sequences of behavior development.

Behavior as well as physique will be brought under more systematic supervision through a developmental type of pediatrics. A complete system of developmental supervision will begin with an anticipatory mental hygiene of the expectant parents, and with the birth of the infant. Using improved and to some extent socialized methods of diagnosis, it will follow the child's development at significant intervals to ascertain the assets and liabilities of his growth makeup. For social reasons it will have regard for positive potentialities as well as for deficits and abnormalities. For the social welfare it will be directed toward detecting and conserving what is distinctive and superior in the individual infant and preschool child. A rigorous recognition of the factor of individuality would save even a partially socialized system of developmental supervision from the dangers of regimentation. Parents even today want to know all that it is possible to know about *their* child. Culture will some day see to it that the parents will be told.

The inequalities of our present-day social provisions for the preschool child are glaring. At one extreme we have the infant born without record and without medical supervision in the squalor of a rural or city slum. At the other extreme is the infant born in a hospital and surrounded with continuous safeguards and periodic protections. *Only through a democratically conceived system of developmental supervision can we attain a more just and universal distribution of developmental opportunity for infants and preschool children.*

This ideal is no more utopian than the principle of universal elementary education. Indeed it represents the next logical extension of this principle in the culture of tomorrow.

Freedom from want in a socio-economic sense remains a first essential for freedom from psychological want. Underprivileged preschool children suffer not only in a physical sense. They suffer psychologically. They feel mental insecurity. In crowded and shiftless homes, they develop anxieties and perplexities. They see sights and experience shocks from

which more fortunate children are, in decency, spared. Some of the most elementary reserves which lie at the basis of respect for the individual are made impossible.

Overcrowding takes a terrible psychological toll. The newborn infant is entitled to a bassinet. As he grows older, he is entitled to a crib, a pen, and a bed of his own, and a room or a section of a room which he can claim as his own. He deserves this degree of privacy and possession that he may develop a normal sense of individuality. Lacking such a normal sense, he will not respect the individuality of others. Much of the crime which even political democracies have not controlled has its roots in disordered homes which impoverish and distort the early mental development of future citizens. Here is a tangible task in preventive mental hygiene. How can society enter upon this vast task, which if left undone weakens the foundations of democracy? By better housing and increased economic security. Freedom from want is in many ways the first of the four freedoms.

The crippling influence of cramped apartments and squalid tenements cannot be fully overcome by public parks, playgrounds, and school buildings. It is the intimate architecture of the home which ceaselessly impinges on the growing child. The postwar period is bound to bring about far-reaching alterations in domestic housing. There will be need of a new technology which will create more than shelter and physical comfort. It will plan for psychological and educational values, particularly in behalf of the infant and young child. Such planning must be undertaken by architects who work in close cooperation with hygienists and scientists who understand the needs of child development. Socio-economic security thus reaches down into the most fundamental determinants of mental health.

Better housing means better homes,—but only when parents are guided and educated into proper methods of child care. There are countless homes in America in which mothers, fathers, and other elders in the household use harsh modes of punishment even toward young children: scolding, slapping, cuffing, shaming, and beating. These primitive, undemocratic methods of discipline have no place in the culture of tomorrow.

row. They are grossly inconsistent with the spirit of democracy, and as such they must be reached and overcome by public health and education measures.

§ 3. PARENTAL AND PREPARENTAL EDUCATION

A WELL-KNOWN BEHAVIORIST, interested in the welfare of children, said, some years ago: "It is a serious question in my mind whether there should be individual homes for children—or even whether children should know their own parents." This thought-provoking remark brings into sharp focus the significance of parent education and parent guidance.

There is no evidence in the biology of the species or in the structure of society that the family and the home will cease to be the most fundamental component of the culture of tomorrow. The inadequacies of the home will be steadily reduced by direct approach through adult education, and by specific guidance. Such personalized guidance can be effected through the nursery school as a guidance center, supplemented by periodic examinations of the growing child under a system of developmental supervision.

In addition to specific, individualized parent guidance, there are vast areas of general education. Much of this must continue on an adult level, contemporaneously with the development of the child. But a great deal more can be accomplished at a preadult level, in the secondary school and junior college years.

From the standpoint of public policy, preparental education is in many ways more basic than parental education. The culture of yesterday has been a bit squeamish about attacking this great educational problem which concerns particularly the preadult years, ignoring the certain prospect that most maturing adolescents will in time become mothers and fathers. If, in a constructive way, we can reach the attitudes of these adolescents in their latent strength we shall be performing double educational service. We shall be shaping the careers of the adolescents as individuals

and at the same stroke shall be erecting safeguards for the healthier development of the oncoming generation.

How can these adolescents, these preadults, be reached? By a more frank presentation of the elementary facts concerning the cycle of human growth. Biology, in spite of its concreteness, has been studied too much in the abstract as far as human life is concerned. We need a humanized biology, or rather we need an adequate course of instruction in human biology dealing candidly with the origin, physical growth, and mental growth of the human child. In this way we can bring into the curriculum a practical type of psychology concerned with the laws of human nature and with the development of the child mind. Such a psychology, far from being overintrospective, would tend to take the adolescent out of himself and enable him ultimately to assume more objective views of the problems of parenthood. Education frankly addressed to the problems of early human development and child behavior would bear fruit in a decade, because in a few years these youths, whether in shop or college, will be fathers and mothers with a more intelligent outlook upon the life cycle of a newborn infant of their own.

And outlook is more basic than technique; for the wise application of technique requires an appreciation of principles, a *philosophy* of *individual development*. A developmental philosophy is part of the democratic ideology. It is a motivating cultural force in determining methods of child care in the home and in the nursery school.

* * * *

The culture of tomorrow will be increasingly child-centered. There is no more powerful corrective for the aberrations of culture than folkways which pay respect to the individual. That respect must be based upon refinement of understanding. Every generation rediscovers and re-evaluates the meaning of infancy and childhood.

APPENDIX A

THE ACCOMPANYING FIGURES 16 and 17 illustrate the method of scheduling the self-regulation behavior days. The blank record form, Figure 16, provides for a lunar month period of 4 weeks or 28 days. It also provides for notations of the date, age, and weight, and for a brief daily comment in the vertical marginal columns.

The events of the day are recorded on the thin horizontal line which traverses the whole day from midnight to midnight on an hourly basis.

The heavy vertical lines locate 6:00 A.M., 12:00 noon, and 6:00 P.M.

Figure 17 pictures excerpts from an actual chart showing how the recordings were made for the 4th week, 16th week, and 28th week of Infant S.

In actual use, cross hatching or solid color indicates sleep. Clear stretches indicate wakefulness. Feeding is indicated by the short horizontal bars under which the amount of the feeding is recorded in ounces. *X* indicates crying; *V*, vomiting; *BM*, bowel movement; *OJ*, orange juice; *B*, bath; *AW*, awakened; *WA*, water; *CG*, carriage.

By this method of charting, the trends from day to day can be read down the course of the chart.*

[illegible]

* Blank forms (11 x 17) for these Behavior Day Charts are available at cost price. Address: The Psychological Corp., 522 Fifth Avenue, New York City, New York.

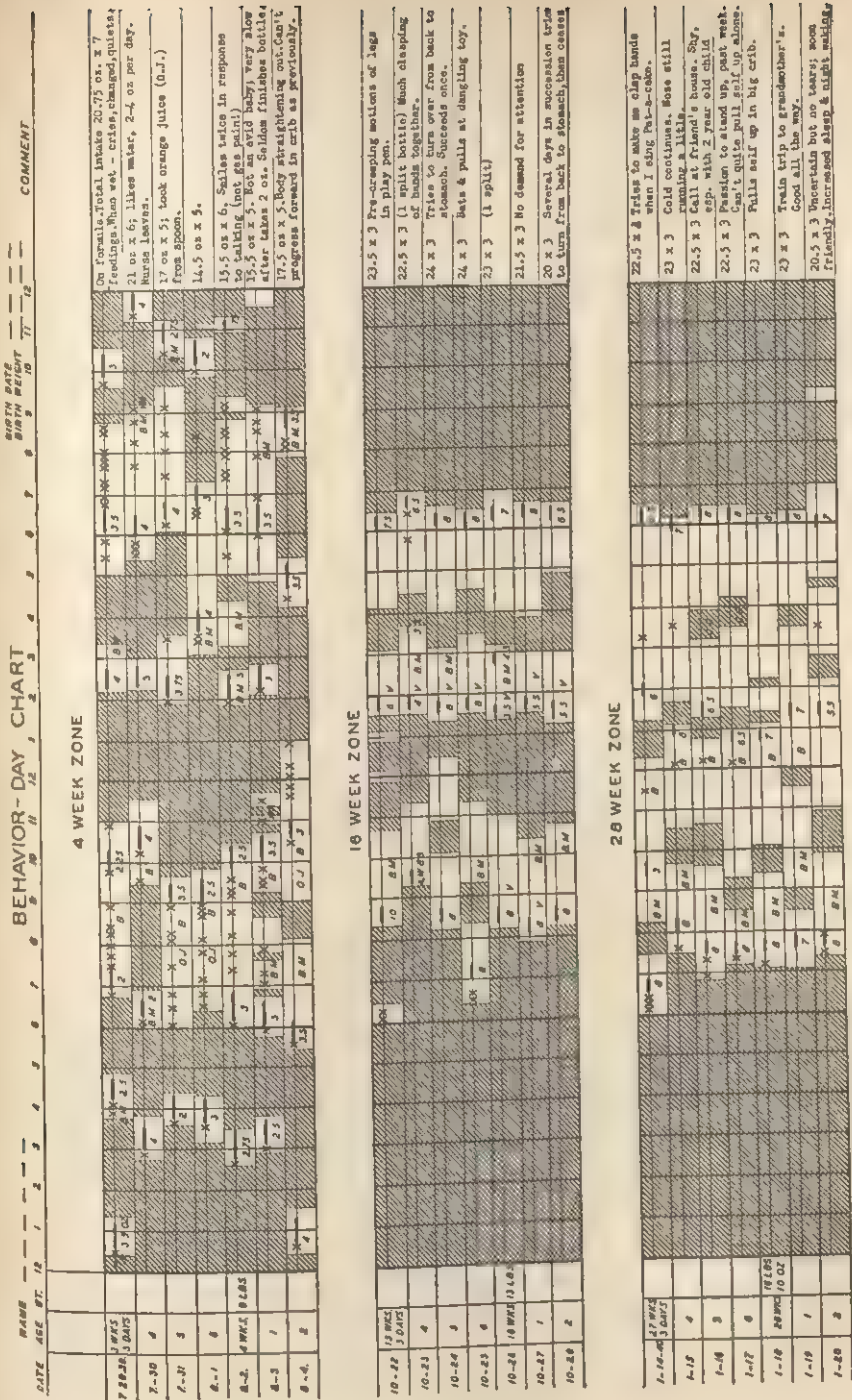


Fig. 17. Excerpts from an actual chart showing the recordings for 4th, 16th and 28th weeks.

- Code**
- = asleep
 - = awake
 - = crying
 - = vomiting
 - = orange juice
 - = bath
 - = BM = bowel movement
 - = feeding
 - = awakened
 - = water
 - = carriage

APPENDIX B

THE YALE GUIDANCE NURSERY

§1. ORGANIZATION

THE GUIDANCE NURSERY of the Yale Clinic of Child Development has been in operation since 1926. Its original purpose was to provide facilities for the observation and guidance of young children and to develop flexible, individualized procedures for the guidance of parents. This same purpose holds today although there have been many changes in arrangements and procedures.

In 1926, children were frequently in attendance individually or in small groups of three to six. Only "problem children" between the ages of 18 months and 5 years were admitted, the duration of their nursery contact depending upon the extent of their problems. Some children attended one or two days a week, others every day. New cases were added and old ones dropped when their adjustment could be taken over entirely by the home. Only a few children attended throughout the entire year. The parent was expected to observe the child's behavior in the nursery from behind one-way-vision screens, and to discuss it with the guidance teacher, who in turn made home visits to observe the parents' management of the child, and to give further guidance in the home.

In 1929, it was decided to inaugurate a continuous attendance group made up of children who presented no special problems. Five stable, intelligent children, varying around 2 years in age, were chosen to attend school daily throughout the year. To this normal nucleus were added children with problems, who attended school for short periods of time, and who were studied and observed intensively by parents and clinic staff members.

ORGANIZATION

In 1935, the nursery school was expanded so that two groups of children from 2 to 3, and from 3 to 5 years of age attended simultaneously. In this way more children could be followed, with a greater number of contemporaries for comparison. This service was on a non-tuition basis until 1936, when a small fee was charged.

The present system was inaugurated in 1939, when the normal-problem basis for accepting children was abandoned, since the "normal" children frequently had difficulties comparable to the "problem" children. The emphasis at this time also changed from studying problems, as such, to analyzing behavior in relation to various types of personality and different levels of development. To obtain a cross section of development at succeeding age levels the nursery was again reorganized into five groups with the following age ranges when the children enter in September:

<i>Age in months</i>	<i>Days attending</i>	<i>Hours</i>	<i>Maximum no. in group</i>
A. 18-21	Wednesday	9:30-11:00	8
B. 21-24	Monday, Friday	9:00-11:00	10
C. 24-30	Tues., Thurs., Sat.	9:00-11:30	12
D. 30-36	Mon., Wed., Fri.	9:00-11:30	15
E. 36-42	Tues., Thurs., Sat.	9:00-11:30	18

These children not only attend school throughout the academic year, but also may continue in the nursery for two or three years. Occasionally a child has been followed at the Clinic from infancy. Most of the children are in the high average or superior range of developmental status and home environment. In general, the children are chosen in order of application, exceptions being made when the need for nursery school is urgent.

A tuition of seventy-five cents a morning is now charged, but there is a sliding scale for parents who are unable to afford this fee. Occasionally scholarships are given to children who would otherwise be unable to attend school. Tuition charges are based, not upon the entire term, but on the actual days of attendance.

Each group is started in September with a small number of children and is gradually increased to the maximum that can be handled efficiently. Since the older children can absorb more stimulation from contemporaries and need less adult supervision, their groups are somewhat larger than those for younger children. There is a waiting list for each age group "on call"; whenever a regular member of the group is absent, children are invited from this reserve list.

Lunch and afternoon naps were discontinued when the alternate day system was introduced, as it was felt that eating and sleeping problems could be handled better at home where the situation is simpler for the child. Each individual problem is discussed in detail with the parent and techniques of guidance in relation to home behavior are given.

§2. PERSONNEL AND EDUCATIONAL ACTIVITIES

THE NURSERY is under the supervision of a pediatrician who makes developmental examinations of the children prior to admission, and conducts repeated interviews with the parents by way of guidance. The children are re-examined at 6-month intervals. In selected cases, examinations are also made during the period of infancy and continued up to the age of six and beyond. Extended conferences are held with the parents after each examination.

The staff includes, also, a principal and an associate guidance teacher, two assistants, and two home externs. The two head teachers render specific assistance, both in connection with the examinations and the guidance work. The home externs divide their time between the guidance nursery and the homes of children who are in attendance at the nursery. Each extern resides in a home, which arrangement provides a 24-hour association with the child under observation. This arrangement has served to define the problems of home guidance in relation to the nursery guidance. These, and other problems, are discussed in weekly conferences of the staff under the direction of the pediatrician.

The Guidance Nursery is housed in the Yale Clinic of Child Development which is a subdivision of the School of Medicine of Yale University. The nursery functions as an adjunct of the diagnostic and advisory service of the Clinic.

The nursery occupies seven rooms of various sizes which accommodate two age groups simultaneously. A play court and a grassy play yard are immediately accessible.

The nursery in its university setting serves three distinguishable but closely related functions: (1) guidance and educational service for children and parents (2) scientific observation of child behavior and guidance methods (3) instruction for graduate students, medical students, and students of the School of Nursing. To carry out all of these functions with a minimum of disturbance to the children presented a ubiquitous problem which has been solved by the installation of one-way-vision facilities.

The accompanying illustration (Figure 18) pictures the arrangements of The Yale Guidance Nursery and shows the various provisions for one-way-vision observation. Figure 19 pictures a corner of the large observation station (1a) which can accommodate as many as twenty-five observers.

Figures 20 and 21 picture a combination-convertible play house, climbing gym, and post-office, etc. The post-office section is removable and when shifted to other parts of the nursery it becomes a very effective prop for many different uses.—Almost any manual training department can build a similar unit adapted to some available corner.

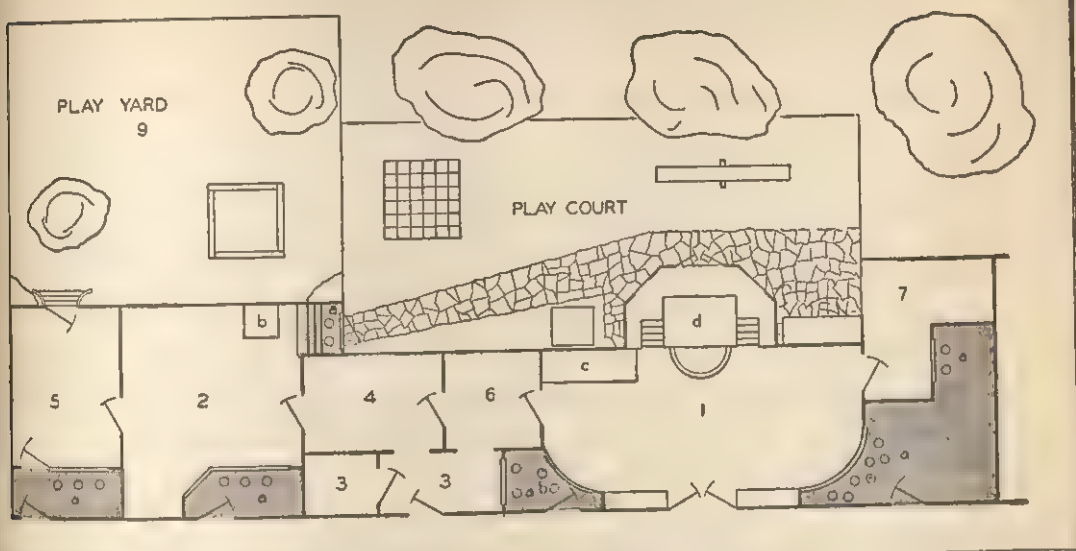


Fig. 18. Arrangements of The Yale Guidance Nursery. 1. Main Room: Older Age Groups 1c. Convertible Playhouse and Gym 1d. Housekeeping Unit (on elevated platform) 2. Room for Junior Age Group 2b. Housekeeping Unit and Gym 3. Toilet and Wash Rooms 4. Cloak Room: Older Age Groups 5. Cloak Room: Junior Age Groups 6. Music Room 7. Kitchenette and Studio 8. Play Court: Older Groups 9. Play Yard: Younger Groups

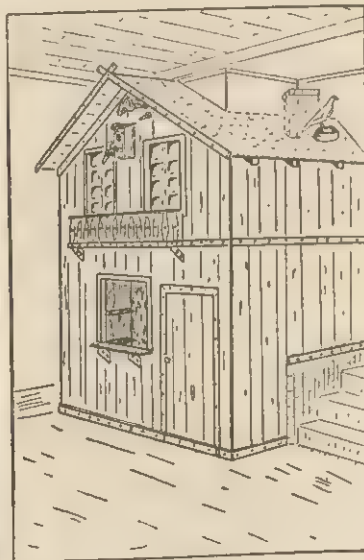
One-Way-Vision Facilities *

1b, 2a, 3b = Observation Stations 3a. Observation Station (with one-way mirror) 5a, 7a, 8a = Observation Stations

* Screen indicated by ==



Detail of interior of one way vision observation station. Screen affords view of Guidance Nursery (Fig. 19).



Detail of Convertible Play House Equipment (Fig. 20).

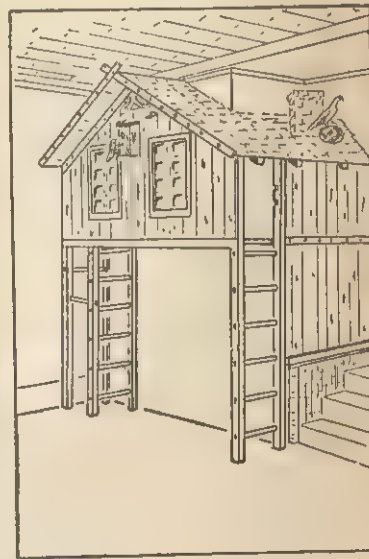


Fig. 21. House converted into gym by detachment of the "post office section." The post office section is a movable feature, which can be used for a diversity of dramatic purposes (post office, ticket office, store, etc.)

§3. ONE-WAY-VISION OBSERVATION

THE ONE-WAY-VISION SCREEN is a device which permits an unseen observer to see. It enables him to see many things which he could not otherwise see at all, and brings him closer to the realities of child behavior because it removes the distorting and the disturbing influences of the observer. It is not merely a laboratory gadget but an adaptable technique which has many practical uses both for controlled and naturalistic observation and for educational demonstrations. It is a contrivance which combines intimacy of observation with detachment.

The principle of the one-way-screen is relatively simple. Perhaps you have had an experience like this: You walked down a sunny path of a garden; you opened the screen door of a porch located at the end of the path; to your surprise you found in the shadow of the porch someone whom you had not noticed at all while you were in the garden. Yet all the while this person could see you plainly. To construct a one-way-vision booth one must imitate these conditions. The observer must be in a partial darkness; light should not stream directly through the screen. The observer's station should also be carpeted to absorb sound and light. The surface of the screen which faces the field of observation is painted white, or painted scenically in bright-colored enamel, to produce a diffuse dazzle which makes the screen appear opaque. Thus the screen is transparent in one direction only.

In the guidance nursery at Yale an expansive screen of this nature serves for a commodious room which accommodates thirty stools of graduated heights, so that a group of students may assemble amphitheatre-wise for observation of activities and demonstrations in the main nursery. An offset provides close-up observation of the children in the kitchen unit. A second nursery play-room is also provided with a screen the wainscote of which is decorated with murals.

It should be emphasized that concealment is a subsidiary or negative value of one-way-vision. The screen was not designed for spying, but for positive educational and scientific controls of observation. One would emphasize that one-way-vision protects the privacy of the children and, on occasions, the privacy of their attendants and their parents. The invisibility of the observers serves to make the observation more serious and purposeful.

The nursery is abundantly equipped with large and small observation stations effectively concealed by one-way-vision screening. (Observation of the bathroom is accomplished through a one-way-vision mirror.) These observation stations can be readily entered from a hallway and the flexibility of this arrangement facilitates brief and incidental observations as well as prolonged observations and study. Similar arrangements can be incorporated into almost any nursery school unit with a slight expenditure of ingenuity. The preparation

ONE-WAY-VISION OBSERVATION

of a one-way-vision screen offers no great difficulties. The method of preparation is described below.

The Preparation of a one-way-vision screen. Ordinary 16-mesh-wire screen can be used. Thin white enamel paint may be applied with a painter's brush in the regular manner, if done with care so as not to clog the mesh. The paint should dry between the several coats. No. 30 wire cloth has definite advantages, particularly if casein paint instead of ordinary enamel is used. The casein paint should be thinned down with water to the consistency of thin cream and then applied with an air brush. At intervals the air brush should be used to force air only through the screen in order to blow out any excess paint which may have clogged the mesh. This process is repeated four or five times. Casein paint dries rapidly and the successive coats may be applied in the course of one day.

It is best to apply the paint before the screens are permanently mounted. If the screens are already in position, an absorbent barrier should be placed behind the screen to collect the transmitted paint spray.

The location of the observers' station is of critical importance. The station should be as dark as possible. Enough light for ordinary recording purposes will in any event enter through the screen. Ideally the observation station should be located on the window side of the room. Care should be taken so that direct light from windows or from lamps will not strike directly through the screens. Such direct rays of light tend to reveal the observers' eye-glasses and light colored objects. Invisibility is increased by wearing dark clothes. The efficiency of the one-way-vision screen is also increased if the room upon which the screen gives is illuminated by indirect rather than direct lighting.

The walls of the observation station should be painted black or midnight blue. Dark curtains draped on the walls and thick carpeting on the floor serve to silence sounds inadvertently made by the observers. Placement of plate glass behind the screen excludes sound but interferes with ventilation. Strict silence is an extremely important rule. Our injunction to the observer who enters the station for the first time is, "Be absolutely quiet. The child can hear you even though he cannot see you."

APPENDIX C

TOYS, PLAY MATERIALS, AND EQUIPMENT

IMPROVISED AND CASUAL MATERIALS such as clothespins, discarded containers, firm cloth, clean short lengths of rope, and similar materials are often superior to more elaborate manufactured toys. The choice of any toys must, of course, be safeguarded. Toys should be clean, and should be of such shape, size, and material that they cannot do harm to eyes, ears, nose, or throat!

Birth-3 months

- Bright dangling objects
- Bright piece of cloth to hang over crib
- Ring rattle—bright colored plastic rings on one larger ring
- Small silver dumbbell rattle
- Rubber squeaking toy

3-9 months

- Cradle Gym
- Rubber blocks with bells inside
- Teething beads
- Water ball—heavy celluloid with floating objects inside

TOYS, PLAY MATERIALS, AND EQUIPMENT

6-12 months

"Babee Tenda"—seat suspended in the middle of a table (In place of high chair—no tipping, convertible into table)

"Tot seat"—can be used in home or car

Nested measuring cups

Spoon and cup

Cradle Bounce

Cradle Spin

9-12 months

Play pen

Hard rubber blocks—good for biting

Square or round block stacks—colorful blocks fitted on large peg

Box or basket with large clothespins

Small ball—encourages locomotion

Water toys

Wrist bells

Bright colored heavy plastic cereal bowls

12-18 months

Taylor Tot—for mother to push child in, and for child to use as Kiddie Kar

Kiddie Kar—low enough so that child has whole foot on ground

Cart—to fill and pull

Pull toy—as Caterpillar of various colors

Push toy—a small cart with long handle

Sweeping sets with broom and mop

Balls

Blocks—small, bright colored

Boxes—simple ones to open and close

Color cone—bright colored rings of graduated size to fit over disk

Water toys

Woolly or cloth soft animals—eyes should be painted or embroidered, not buttons attached with sharp points

Cloth dolls

Books—cloth and heavy cardboard with familiar objects and bright colors

TOYS, PLAY MATERIALS, AND EQUIPMENT

Equipment suitable throughout the Preschool Years

Climbing apparatus—as climbing gyms, ladders and boxes

Small and large boards in combination with climbing apparatus increase its usefulness

Packing boxes—large and sturdy enough for child to climb on

Slide

Boards for balancing and sliding—with cleat on each end to hold securely

Bouncing board—suggested proportions 1 in. \times 15 in. \times 13 ft. ash board

Boards and saw horse—for see-saw, inclines, etc.

Small boards—for building, hauling, etc., suggested size $\frac{3}{4}$ in. \times 6 in. \times 36 in.

Hollow blocks—suggested size 6 in. \times 12 in. \times 12 in., and 6 in. \times 12 in. \times 24 in.

Building possibilities increased when combined with small boards

Logs

Kegs

Sand box

Sand toys: spoon, sugar scoop, pail, cans, sifter

Swing—better home than school equipment

Wheelbarrow

Wagon

Train, dump truck, steam shovel, etc.—large enough for child to ride on

Small airplanes, automobiles, trucks, boats, and trains

Baskets and boxes

Nests of boxes or cans

Boxes of spools, small blocks, etc.

Rope and string

Animals—domestic or Noah's ark sets

Dolls—rubber preferable for bathing purposes

Doll clothing—with large buttons and buttonholes

Doll carriage

Doll bed—sturdy and large enough for child to get in

Covers, mattress, pillow

Chest of drawers, cupboard

Suitcases, chest

Table and chair—child's size

Stove

Dishes and cooking utensils

Telephone

Broom, dustpan, mop, dustcloth

TOYS, PLAY MATERIALS, AND EQUIPMENT

Laundry tub, ironing board, iron, adult size clothespins
Bright colored squares of cloth—for doll covers, table covers, laundry, costumes, etc.
Costume box—pocketbooks, hats, gloves, scarf, jewelry, curtains, various lengths of cloth, etc.

Clay

Crayons—large size

Easel

Easel paper—unprinted newspaper satisfactory

Brushes—long handle with brush at least $\frac{1}{2}$ in. wide for paint. Wider brush with short handle better for "painting" with water

Paint—powder paint mixed with water. Ingredients should be harmless and non-staining

Musical instruments—as wrist bells, drum, dinner gong, xylophone, music box

Nature specimens—as fish, turtles, salamanders, snails, birds, plants, animals

Equipment especially suitable for:

18 months

Stairs

Swing

Rocking horse

Push cart

Pull toy—peg wagon, small cart, animal

Chest of drawers—child's size, easily manipulated

Large ball

Bingo Bed—hammer and peg toy

Blocks—colored and small (about 2" cubes)

Color cone—graduated wooden rings on peg

Pots and pans with covers

Pocketbook

Soft cloth or woolly animals

Wrist bells

Music box

Pylox blocks

24 months

Boards—for walking up inclines, bouncing, etc. (with cleats on end)

Climbing apparatus with platform easily accessible

Slide—attached to climbing apparatus or steps

Rocking boat

TOYS, PLAY MATERIALS, AND EQUIPMENT

Kiddie Kar

Cars and trucks

Interlocking trains

Light hollow blocks

Small colored blocks—cylinders, cubes, etc.

Peg boards with large pegs in a variety of colors

Jars with screwing tops

Baskets

Doll—soft and washable

Doll carriage

Doll bed—large and sturdy enough for child to get in

Dishes—non-breakable

Iron

Cloth squares of bright colors—for doll covers, table cloths, etc.

Telephone

Crayons—large size

House that Jack Built

30 months

Large packing boxes

Logs

Boards for building, carrying, hauling, and walking

Large hollow blocks

Tricycle

Wheelbarrow

Fire truck, train, steam shovel, dump truck large enough for child to sit on

Large wooden beads and string with long metal tip

Screwing toys

Advanced pegboard—pegs of varying sizes fitting holes on cover of box

Rotogear

Clay

Finger paint

Soap bubble pipes

Large paint brushes for painting with water

16 months

Climbing apparatus with boards for different platform levels

Saw horses and boards—for see-saw, bridges, etc.

TOYS, PLAY MATERIALS, AND EQUIPMENT

Large hollow blocks with boards

Kegs

Tricycle

Transportation toys—wagon, train, dump truck, etc.

Solid blocks with unit and multiples of unit, cylinders, quarter circles, triangles, etc

Toys with large nuts, bolts, wrench, etc., such as Tot's tool box

Simple wooden puzzles with few pieces

Object lotto—matching game

Soap bubble pipes

Dolls

Doll equipment—bed, carriage, covers

Housekeeping equipment—stove, dishes, broom, clothesline, clothespins, iron

Costume box—with hats, gloves, cloth, pocketbooks, etc.

Blunt scissors

Colored paper

Easel, easel paper, water color paint, brushes, at least $\frac{1}{2}$ " wide

Finger paint

Clay

Postcard collection

Mounted pictures of nature, transportation, etc.

48 months

Climbing equipment

Trapeze and rings

See-Saw

Garden tools

Work bench with adult size hammer, saw, nails

Blocks—large hollow and small multi-shaped

Wooden picture puzzles

Lotto matching games

Tinker toys

Families of dolls and teddy bears

Doll clothes with large buttons and buttonholes

Housekeeping equipment

Store material

Nurses' and doctors' kits

Costume box

Blackboard and chalk

TOYS, PLAY MATERIALS, AND EQUIPMENT

Whiteboard with crayons

Blunt scissors—sturdy and fairly large

Paste and colored paper

Paint

Clay

Finger paint

Wide variety of nature specimens

APPENDIX D

BOOKS FOR PRESCHOOL CHILDREN

The books are classified by age under five headings: 1. Story Collections 2. Picture and Story Books 3. Collections of Poetry 4. Information Books 5. Song Books. The books are approximately graded by ages.

§1. STORY COLLECTIONS

AGE	AUTHOR OR ILLUSTRATOR	TITLE	PUBLISHER
2-4 yrs.	Brown, Eleanor	The Little Story Book	Oxford
2-6 yrs.	Assoc. for Childhood Education	Told Under the Blue Umbrella	Macmillan
2-6 yrs.	Mitchell, Lucy S.	The Here and Now Story Book	Dutton
2-6 yrs.	Mitchell, Lucy S.	Another Here and Now Story Book	Dutton
4-6 yrs.	Bacmeister, Rhoda	Stories to Begin On	Dutton
4-6 yrs.	Gay, Romney	Book of Nursery Tales	Grosset & Dunlap
4-6+ yrs.	Assoc. for Childhood Education	Told Under the Green Umbrella	Macmillan

BOOKS FOR PRESCHOOL CHILDREN

AGE	AUTHOR OR ILLUSTRATOR	TITLE	PUBLISHER
4-6+ yrs.	Huber, Miriam	Story and Verse for Children	Macmillan
4-6+ yrs.	Richardson, Frederick	Old, Old Tales Retold	Donohue
4-6+ yrs.	Rojankovsky, Feodor	Tall Book of Nursery Tales	Harper

§2. PICTURE AND STORY BOOKS

15 mo.-2 yrs.	Cloth or heavy cardboard books of familiar objects.*		
15 mo.-2 yrs.	Cloth or heavy cardboard books of domestic animals.*		
15 mo.-2 yrs.	Kunhardt, Dorothy	Pat the Bunny	Simon & Schuster
15 mo.-2 yrs.	Palmer, Robbin	Timothy's Shoes	Whitman
15 mo.-2 yrs.	Smith, Bob	My First Book	Simon & Schuster
2-3 yrs.	Bertail, Inez	Time for Bed	Doubleday
2-5 yrs.	Beyer, Evelyn	Just Like You	Wm. Scott
2-3 yrs.	Flack, Marjorie	Angus and the Cat	Doubleday
2-3 yrs.	Flack, Marjorie	Angus and the Ducks	Doubleday
2-3 yrs.	Flack, Marjorie	Ask Mr. Bear	Macmillan
2-3 yrs.	Gay, Romney	Cinder	Grosset & Dunlap
2-3 yrs.	Gay, Romney	Corally Crothers' Birthday	Grosset & Dunlap
2-3 yrs.	Green, Mary McB.	Everybody Eats	Wm. Scott
2-3 yrs.	Hurd, Clement	Bumble Bugs & Elephants	Wm. Scott
2-3 yrs.	Lenski, Lois	Davy's Day	Oxford
2-3 yrs.	Lenski, Lois	The Little Family	Doubleday
2-3 yrs.	Little, Irene	A Rainy Day Story on the Farm	Whitman
2-3 yrs.	Maloy, Lois	Toby Can Fly	Grosset & Dunlap
2-3 yrs.	Masha	Three Little Kittens	Simon & Schuster
2-3 yrs.	Mathews, Virginia	Stop-Look-Listen	Hampton
2-3 yrs.	Wright, Ethel	Saturday Walk	Wm. Scott
2-4 yrs.	Becker, Charlotte	The Unlike Twins in Nursery School	Scribners
2-4 yrs.	Brown, Margaret W.	A Child's Goodnight Book	Wm. Scott
2-4 yrs.	Brown, Margaret W.	The Little Fireman	Wm. Scott

* Since this particular type of book goes out of print very quickly, we are not suggesting specific titles.

PICTURE AND STORY BOOKS

AGE	AUTHOR OR ILLUSTRATOR	TITLE	PUBLISHER
2-4 yrs.	Brown, M. W. & Hurd, C.	Goodnight Moon	Harper
2-4 yrs.	Francoise	The Gay ABC	Scribners
2-4 yrs.	Freund, Rudolph	The Animals of Farmer Jones	Simon & Schuster
2-4 yrs.	Hader, Berta & Elmer	Whiffy McMann	Oxford
2-4 yrs.	Lenski, Lois	The Little Auto	Oxford
2-4 yrs.	Lenski, Lois	The Little Sailboat	Oxford
2-4 yrs.	McDonald, Golden	Big Dog, Little Dog	Doubleday
2-4 yrs.	McDonald, Golden	Red Light, Green Light	Doubleday
2-4 yrs.	Moore, Clement C.	The Night Before Christmas	Simon & Schuster
2-4 yrs.	Rey, H. A.	Where's My Baby?	Houghton Mifflin
3-4 yrs.	Bertail, Inez	Summer & Winter	Veritas
3-4 yrs.	Brann, Esther	Bobbie & Donnie Were Twins	Macmillan
3-4 yrs.	Ets, Marie Hall	In the Forest	Viking
3-4 yrs.	Evers, Helen & Alf	Copy Kitten	Rand McNally
3-4 yrs.	Martin, Dahrís	Little Lamb	Harper
3-4 yrs.	Tudor, Tasha	Pumpkin Moonshine	Oxford
3-4 yrs.	Williams, Gweneira	Timid Timothy	Wm. Scott
3-5 yrs.	Brown, Margaret W.	Baby Animals	Random House
3-5 yrs.	Brown, Margaret W.	The Noisy Book	Wm. Scott
3-5 yrs.	Brown, Margaret W.	Shhhhhh. . . . Bang	Harper
3-5 yrs.	Coe, Lloyd	Charcoal	Crowell
3-5 yrs.	Donaldson, Lois	Karl's Wooden Horse	Albert Whitman
3-5 yrs.	Hogan, Inez	Twin Kids	Dutton
3-5 yrs.	Lowrey, Janette	The Poky Little Puppy	Simon & Schuster
3-5 yrs.	Morris, Dudley	The Truck that Flew	Putnam
3-5 yrs.	Wiese, Kurt	The Story about Ping	Viking
3-6 yrs.	Bannerman, Helen	Little Black Sambo	Lippincott
3-6 yrs.	Beskow, Elsa	Pelle's New Suit	Harper
3-6 yrs.	Brooke, L. Leslie	Johnny Crow's Garden	Warne
3-6 yrs.	Brown, Margaret W.	The Little Fisherman	Wm. Scott
3-6 yrs.	Burton, Virginia L.	Choo-choo	Houghton Mifflin
3-6 yrs.	Burton, Virginia L.	Mike Mulligan and his Steam Shovel	Houghton Mifflin

BOOKS FOR PRESCHOOL CHILDREN

<i>AGE</i>	<i>AUTHOR OR ILLUSTRATOR</i>	<i>TITLE</i>	<i>PUBLISHER</i>
3-6 yrs.	DeAngeli, Margaret	Ted and Nina Go to the Grocery Store	Doubleday
3-6 yrs.	deBrunhoff, Jean	The Story of Babar	Random House
3-6 yrs.	Flack, Marjorie	The Boats on the River	Viking
3-6 yrs.	Flack, Marjorie	The New Pet	Doubleday
3-6 yrs.	Flack, Marjorie	Tim Tadpole and the Great Bullfrog	Doubleday
3-6 yrs.	Hartell, J. A.	Over in the Meadow	Harper
3-6 yrs.	Hartwell, Marjorie	Into the Ark	Franklin Watts
3-6 yrs.	King, Dorothy N.	Find the Animals	Harcourt Brace
3-6 yrs.	Lenski, Lois	The Little Airplane	Oxford
3-6 yrs.	Lenski, Lois	The Little Farm	Oxford
3-6 yrs.	Lenski, Lois	The Little Fire Engine	Oxford
3-6 yrs.	Lenski, Lois	The Little Train	Oxford
3-6 yrs.	Lindman, Maj	Snipp, Snapp, Snurr and the Gingerbread	Albert Whitman
3-6 yrs.	Lindman, Maj	Snipp, Snapp, Snurr and the Red Shoes	Albert Whitman
3-6 yrs.	Petersham, Maud & Miska	The Christ Child	Doubleday
3-6 yrs.	Scott, William	The Milk that Jack Drank	Wm. Scott
3-6 yrs.	Slobodkina, Esphyr	Caps for Sale	Wm. Scott
4-6 yrs.	Austin, Margot	Peter Churchmouse	Dutton
4-6 yrs.	Black, Irma S.	This is the Bread that Betsy Ate	Wm. Scott
4-6 yrs.	Bragg, Mabel	The Little Engine that Could	Platt & Munk
4-6 yrs.	Brown, Margaret W.	The Runaway Bunny	Harper
4-6 yrs.	Gag, Wanda	Millions of Cats	Coward McCann
4-6 yrs.	Hall, William	Tell Time the Rabbit	Crowell
4-6 yrs.	Hurd, Edith T.	The Annie Moran	Lothrop, Lee & Shephard
4-6 yrs.	Hurd, Edith T.	Hurry, Hurry	Wm. Scott
4-6 yrs.	Heyward, DuBose	The Country Bunny	Houghton Mifflin
4-6 yrs.	Johnson, Laura & Jack	The Leaky Whale	Houghton Mifflin

COLLECTIONS OF POETRY

AGE	AUTHOR OR ILLUSTRATOR	TITLE	PUBLISHER
4-6 yrs.	Leaf, Munro	The Story of Ferdinand	Viking
4-6 yrs.	McDonald, Golden	The Little Island	Doubleday
4-6 yrs.	Mitchell, Lucy S.	The New House in the Forest	Simon & Schuster
4-6 yrs.	Sage, Juniper	The Man in the Manhole	Wm. Scott
4-6 yrs.	Schneider, Herman & Nina	How Big is Big?	Wm. Scott
4-6 yrs.	Spiegel, Doris	Danny and Company 92	Coward McCann
4-6 yrs.	Turner, N. & Gergely, T.	When it Rained Cats and Dogs	Lippincott
5-6 yrs.	d'Aulaire, I. & E. P.	Children of the North- lights	Viking
5-6 yrs.	Milne, A. A.	Winnie the Pooh	Dutton
5-6 yrs.	Suess, Dr.	And to Think that I Saw it on Mulberry St.	Vanguard

§ 3. COLLECTIONS OF POETRY

2-4 yrs.	Doane, Pelagie	Mother Goose	Random House
2-4 yrs.	Elliot, Miss	Round the Mulberry Bush	Harper
2-4 yrs.	Gay, Romney	Picture Book	Grosset & Dunlap
2-4 yrs.	Gay, Romney	Mother Goose	Grosset & Dunlap
2-4 yrs.	Rojankovsky, Feodor	The Tall Book of Mother Goose	Harper
2-4 yrs.	Tenggren	The Tenggren Mother Goose	Little Brown
2-4 yrs.	Wright, Blanche F.	The Real Mother Goose	Rand McNally
2-6 yrs.	Assoc. for Childhood Education	Sung Under the Silver Umbrella	Macmillan
2-6 yrs.	Geismer, B. P. & Suter, A. B.	Very Young Verses	Houghton Mifflin
3-6 yrs.	Hubbard, A. and Babbitt, A.	The Golden Flute	John Day
3-6 yrs.	Petersham, Maud & Miska	The Rooster Crows	Macmillan

BOOKS FOR PRESCHOOL CHILDREN

<i>AGE</i>	<i>AUTHOR OR ILLUSTRATOR</i>	<i>TITLE</i>	<i>PUBLISHER</i>
3-6 yrs.	Rossetti, Christine	Sing Song	Macmillan
3-6 yrs.	Stevenson, Robert L.	A Child's Garden of Verses	U. S. Camera
3-6 yrs.	Thompson, Blanche	Silver Pennies	Macmillan
3-6 yrs.	Tippett, James	I Go A-Travelling	Harper
3-6 yrs.	Tippett, James	I Live in a City	Harper
4-6 yrs.	Milne, A. A.	Now We Are Six	Dutton
4-6 yrs.	Milne, A. A.	When We Were Very Young	Dutton
4-6 yrs.	Rhys, Ernest	Book of Nonsense	Dutton

§ 4. INFORMATION BOOKS

The text of many of these books is above the preschool level, but the illustrations and the information simplified will appeal to many preschool children of all ages, according to their interests.

<i>AUTHOR OR ILLUSTRATOR</i>	<i>TITLE</i>	<i>PUBLISHER</i>
Audubon, John J.	Birds of America	Macmillan
Basic Science Education Series	(63 titles)	Row Peterson
	Animals of the Seashore	
	Birds	
	Doing Work	
	Fish	
	Insects and their Ways	
	The Pet Show	
	Useful Plants and Animals (etc.)	
Elting, Mary	Trucks at Work	Garden City
Humphreys, Dena	The Zoo Book	Henry Holt
Huntington, Harriet	Let's Go Outdoors	Doubleday
Huntington, Harriet	Let's Go to the Seashore	Doubleday
Huntington, Harriet	Tune Up	Doubleday
Lent, Henry	Clear Track Ahead	Macmillan
Lent, Henry	Diggers and Builders	Macmillan

SONG BOOKS

<i>AUTHOR OR ILLUSTRATOR</i>	<i>TITLE</i>	<i>PUBLISHER</i>
Little Wonder Book Series	(90 titles)	Chas. Merrill
	Policemen	
	The Circus	
	Our Houses	
	The Grocery Store (etc.)	
Petersham, Maud & Miska	Story Book Series (18 titles)	Winston
	The Story Book of Clothes	
	The Story Book of Coal	
	The Story Book of Food	
	The Story Book of Trains (etc.)	
Peterson, Roger	Junior Book of Birds	Houghton Mifflin
Picture Scripts Series		Grosset & Dunlap
	Fire! Fire!	
	The Fireboat	
	The Tugboat	
Pratt, Gladys L.	American Garden Flowers	Random
Pratt, Gladys L.	Butterflies and Moths	Random
Pryor, William	The Streamline Train Book	Harcourt Brace
Walpole, Ellen W.	Golden Dictionary	Simon & Schuster

§5. SONG BOOKS

Songs in all of the following books range so widely in difficulty that each book, with the exception of "Little Singing Time," is suitable for children throughout the preschool period. The books are listed in order of difficulty, the simplest ones being first on the list.

<i>COMPOSER OR COLLECTOR</i>	<i>TITLE</i>	<i>PUBLISHER</i>
Coleman, S. & Thorn, A.	The Little Singing Time	John Day
Coleman, S. & Thorn, A.	Singing Time	John Day
Coleman, S. & Thorn, A.	Another Singing Time	John Day
Gale, Leah	Nursery Songs	Simon & Schuster
Doane, Pelagie	Favorite Nursery Songs	Random House
MacCarteney, Laura P.	Songs for the Nursery School	Willis
VanLoon, Wilhelm	The Songs We Sing	Simon & Schuster

BOOKS FOR PRESCHOOL CHILDREN

<i>COMPOSER OR COLLECTOR</i>	<i>TITLE</i>	<i>PUBLISHER</i>
Wessells, Katherine T.	Golden Song Book	Simon & Schuster
Baker and Kohlsaas, L.	Songs for the Little Child	Abingdon
Bradford, M. and Woodruff, B.	Keep Singing, Keep Humming	Wm. Scott
Surette, T. W.	Songs from Many Lands	Houghton Mifflin
Davidson and Surette, T. W.	140 Folk Songs	Schirmer Music Co.
Carter, Jessie	Fifty Favorite Lullabies	Whitman
Gordon, Dorothy	Sing it Yourself	Dutton
Graham, M. N.	Christmas Carols	Whitman
Wyckoff, Marjorie	Christmas Carols	Simon & Schuster
Wyckoff, Marjorie	A Child's Book of Hymns	Random House
Seigmeister, Elie	Work and Sing	Wm. Scott

APPENDIX E

MUSICAL RECORDS FOR INFANTS AND YOUNG CHILDREN

It is impossible to arrange phonograph records according to age levels, because of the great range in ability and interest of young children in music. The list includes the various kinds of music which children enjoy. However, all of these recordings will not appeal to all children. Therefore, the list should be used with discrimination. Albums not infrequently combine unsuitable with suitable records. It is regrettable that excellent records so often go quickly out of press.

A useful guide to recorded music for children "from 6 months to 16 years" is published by Oliver Durrell, Inc., N. Y., 1947 (Barbour and Freeman: *The Children's Record Book*.)

<i>Capitol Number</i>	<i>Title</i>	<i>Composer</i>	<i>Artist</i>
Album BD 27	Chisholm Trail (and others)		Tex Ritter
Album BD 52	Here Comes the Band		Louis Castellucci Band

MUSICAL RECORDS

Columbia

Number	Title	Composer	Artist
Album C-94	Christmas Carols		Lyn Murray—Singers
Album M-481	Music of Johann Strauss	Strauss	Kostelanetz Orchestra
Album M-440	Patter Songs from Gilbert & Sullivan	Gilbert & Sullivan	Nelson Eddy
Album C-79	Yale Glee Club		Marshall Bartholomew, Director

Decca

Number

Albums 4 and 24	French Folk Songs for Children		Louis Chartier
C.V. 100	Mother Goose		Frank Luther
C.V. 100	Nursery Rhymes		Frank Luther
C.S. 5	Nursery Rhymes		Frank Luther
Albums 113 and 302	Songs of the South African Veld		Joseph Marais

Disc

Number

Album 607	America's Favorite Songs		Bess Lomax, Pete Seeger, Tom Glazer, Butch Hawes
Album 604	Songs to Grow On (School Days)		Charity Bailey Pete Seeger, Lead Belly Cisco Huston

Victor

Number

Album MS-478	American Spirituals		Kenneth Spencer
7252	Bolero (part 3)	Ravel	Koussevitsky-Boston Sym phony Orchestra
Album M-354	De Camptown Races (in Stephen Foster Album)	Foster	Richard Crooks
Album M-785	Carnival of the Animals	Saint-Saens	Stokowski-Philadelphia Orchestra

MUSICAL RECORDS

<i>Victor Number</i>	<i>Title</i>	<i>Composer</i>	<i>Artist</i>
Album M-639	The Children's Hour	Debussy	Barrere, Salzedo, Britt (Flute, Harp, Cello)
Y-315	El Capitan March	Sousa	Stokowski-Philadelphia Orchestra
4375	Espana Rapsodie	Chabrier	Fiedler-Boston "Pops" Orchestra
1645	The Flight of the Bumble Bee	Rimsky- Korsakow	Jascha Heifetz
Album M-1086	Folk Songs and Ballads		Susan Reed
2122	The Frog Went Courting		John Jacob Niles
11825	Hallelujah Chorus	Handel	Royal Choral Society
10-1273	Home on the Range		Robert Merrill
35792	A Hunt in the Black Forest	Voelker	Victor Orchestra
11880	I Got Plenty O' Nuttin'	Gershwin	Lawrence Tibbett
35792	In a Clock Store	Orth	Victor Concert
10-1089	1) Jazz Legato 2) Jazz Pizzicato	Anderson	Fiedler-Boston "Pops" Orchestra
Y-9	Jingle Bells Fantasy		Victor Salon Orchestra
10-1273	The Last Round Up		Robert Merrill
4314	Marche Militaire	Schubert	Fiedler-Boston "Pops" Orchestra
4390	Music Box	Liadow	Fiedler-Boston "Pops" Orchestra
Y-9	The Night Before Christ- mas (Recitation)	Moore	Milton Cross
Album M-265	Nutcracker Suite	Tschaikowsky	Stokowski-Philadelphia Orchestra
Album M-354	Oh, Susanna (in Stephen Foster Album)	Foster	Richard Crooks
2122	The Old Woman and the Pig		John Jacob Niles
11986	Poet and Peasant Overture	Von Suppe	Fiedler-Boston "Pops" Orchestra
4397	Pop Goes the Weasel		Fiedler-Boston "Pops" Orchestra

MUSICAL RECORDS

<i>Victor Number</i>	<i>Title</i>	<i>Composer</i>	<i>Artist</i>
Y-315	Stars and Stripes Forever	Sousa	Stokowski-Philadelphia Orchestra
2168	Swing Low, Sweet Chariot		John Thomas
1896	Trampin'		Marian Anderson
10-1271	Traumerei	Schumann	Mischa Elman
4390	Turkey in the Straw		Fiedler-Boston "Pops" Orchestra
14726	Valse Triste	Sibelius	Stokowski-Philadelphia Orchestra
15800	Die Walküre (Magic Fire Music)	Wagner	Stokowski-Philadelphia Orchestra

Young Peoples Record Club

<i>Number</i>		
403	Let's All Join In	Peter Seeger

APPENDIX F

SUGGESTIVE READINGS

1. Aldrich, C. Anderson and Aldrich, Mary M. Babies are human beings. New York: Macmillan, 1938, ix + 128.
2. Bacmeister, Rhoda W. Caring for the run-about. New York: Dutton, 1937, pp. 263.
3. Bakwin, Ruth M. and Bakwin, Harry. Psychological care during infancy and childhood. New York: D. Appleton, 1942, xv + 317.
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For convenience of reference the age levels are printed in bold face type and arranged in chronological order.



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CHILD DEVELOPMENT

II. THE CHILD FROM FIVE TO TEN

BY

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GLENN A. E. BULLIS

THE CHILD FROM FIVE TO TEN

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PREFACE

MANY minds have gone into the making of this book,—especially if we include the multitude of infants and children whose growing minds have been our subject of study over a long period of years. The authors of this volume have been associated on the staff of The Yale Clinic of Child Development from ten to twenty years. They have had common interests converging on the universal problem which confronts all children from the moment of birth: the problem of development.

The most basic and dramatic phases of that development are concentrated in the first five years of life. The outward manifestations of early mental growth are remarkably patterned and lawful. In comparison the years from five to ten seemed relatively undefined, for the available literature on these years tended to lump them together in broad generalizations. We were naturally interested to learn whether the precise patterning processes so evident in infancy also project themselves into the school years.

At this point the aforementioned infants and pre-school children came forward to make their contribution! They grew up. The baby, who at 28 weeks had raked at a pellet, and who at 40 weeks plucked it pincerwise, in due course acquired his sixth year molars. He then applied the forceps of his mind (i.e. of his action-system) upon things more abstruse,—on the alphabet and numbers, on crumbs of informa-

tion and moral proprieties. True to his former self his behavior patterns changed with aging. The transformations were gradual and not dramatically obvious; but when our numerous behavior records were analyzed it became evident that the growth of the mind is lawfully patterned in the years from five to ten. The patterns may not be as sharply defined to ordinary observation, but we were amazed at their consistent characteristicness when they were comparatively studied by clinical methods. This volume attempts to set down the characteristicness disclosed.

The logic of our biographic-clinical approach to the study of child development is more fully indicated in the *Introduction*. Knowledge of the dynamic morphology of behavior must be gained by intimate, consecutive, individualized contacts, rather than mass studies. The normative researches, the diagnostic and advisory services of the clinic, the guidance nursery and the systematic pattern analysis of cinema records, —all gave direction and form to the present investigation.

A preliminary work on *The Feeding Behavior of Infants*, reported in a previous volume (1937), proved to be a kind of pilot study for later elaboration. The junior author, Dr. Ilg, as a pediatrician, has had a uniquely rich and varied clinical experience with normal children of all ages up to ten years. Additional experience with deviate and problem children has helped to sharpen her insight into the typical expressions of development.

Mrs. Ames, curator of the Yale Films of Child Development, has devoted special attention to the objective analysis of behavior patterns infallibly recorded in cinema film. She has become an expert in this methodology, which has directly and indirectly illumined the processes of child development at all ages.

Miss Bullis, as assistant in research and in other capacities has been closely identified with our developmental research over a period of twenty years. Her critical judgment and her familiarity with the lives and homes of the children have been invaluable in the prosecution of our study. She has also conducted the visual skills examinations which

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furnished many side lights on the behavior characteristics of children of kindergarten and school age.

The senior author, as director of the clinic, can testify to a long standing interest in infants and young children. Indeed a special interest in children of school age dates back to the turn of the century; and to his first published volume, written with Mrs. Gesell. May he be permitted a smiling nod to that volume and its co-author?

This preface must deal heavily with acknowledgements, for our indebtedness has been heavy. We are indebted to all our colleagues on the clinic staff, past as well as present. Immediately we owe much to Miss Janet Learned, principal of the guidance nursery and to her associates for their knowledge of the individualities of the children as displayed in the pre-school years.

The parents of the children deserve very special mention for their unstinted cooperation in exploring the characteristics of their children. These parents assimilated our developmental point of view and became very skillful in reporting observations which concerned the mechanisms of the growth process. The rapport between home and clinic was close and marked by mutual confidence and interest. We wish to record our admiration of the attitude of the parents and our deep appreciation of their contribution.

Most of our children were studied in New Haven and in the clinic. But in 1942 we made a very fortunate association with The New Canaan Country School, in New Canaan, Connecticut. Here again we became the beneficiaries of a mutual interest in the welfare of the children. The staff of this excellent school gave generously of their time and enthusiasms, and even made special adjustments of their programs in our behalf. We also benefitted from healthy skepticism and criticism. We are indeed grateful to the whole teaching staff, to Mr. Henry Welles, headmaster, and also to Mrs. Paulina Olsen, head of the Lower School, who was formerly chief guidance worker in our own guidance nursery.

For illustrations of the present volume we have made moderate use of diagrammatic and abstract devices. Special thanks are due to Mrs.

PREFACE

Rudolf F. Zallinger for her interest and skill in rendering the sketches which we placed at her disposal.

Since the work of the clinic has deep roots in the past, we would like to refer again to the supports given by Rockefeller funds, The Carnegie Corporation and Yale University. The current enterprises of the clinic have been made possible by continuing support from the Yale School of Medicine; and a generous grant of American Optical Company, through its Bureau of Visual Science.

Why did we write this book which was begun during a war and completed in its aftermath? Perhaps our task was somewhat motivated by a war which has wrought such tragic destruction and injustice upon children. It is no longer trite to say that children are the one remaining hope of mankind. For the rest of our preface may we refer the reader to The Philosophic Postscript with which this book ends.

But one more word about the children themselves. They carry the hope of mankind, because in a democratic culture they give ample evidence of the potentialities of the human spirit, and of its engaging qualities. If we could but capture their transparent honesty and sincerities! They still have much to teach us, if we observe closely enough. Indeed when the child of five reaches the age of ten he becomes so articulate that he can actually tell us something directly about himself and about ourselves. Perhaps at this significant transition age of ten, near the brink of adolescence, we must begin to take children more completely into our confidence.

Meanwhile, we hope that this book will help you to get better acquainted with your children in the years from five to ten.

INTRODUCTION

How this book is built and how it may be used.

Books have origins. And origins often help to answer the inevitable questions as to aims, scope and method. This particular book was not written with design deliberately aforethought, nor yet as a mere after thought. In retrospect we have become aware that it grew from some inner necessity as a developmental sequel of the earlier volume *Infant and Child in the Culture of Today* (1943). The two volumes supplement each other and they may be considered companion volumes; but each is constructed to stand independently.

In a still earlier volume entitled *The First Five Years of Life* (1940), the staff of the Yale Clinic set forth a somewhat systematic summary of the behavior characteristics of normal infancy and pre-school childhood. The data were based on extensive clinical and normative studies, and were presented in the form of age characterizations and genetic sequences.

The present volume follows the same general pattern reflected in previous publications. Indeed in basic arrangement of subject matter, scheme of treatment and format it closely parallels the companion volume (*Infant and Child in the Culture of Today*),—for the very good reason that the laws of child development do not undergo any real change at the age of five.

Our continuing interest in children whom we had studied during

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their infancy and pre-school years, led to annual follow-up observations of these same children during the years from five to ten. The present volume, therefore, is in large measure a biographic-developmental study of the patterning of behavior throughout the first ten years of life. The approach is definitely longitudinal, and our findings are presented in the form of *growth gradients* embracing some seventeen age levels, and ten major fields of behavior. For convenience of reference, as well as an aid to interpretation, the findings are also presented in cross sectional age summaries.

In the Preface we have alluded to the favorable circumstances which have surrounded this survey of the psychological growth of the school child. The cohesion and cooperativeness of the staff over a long period of years have enabled us to do some group thinking in the interpretation of our voluminous data. One-way-vision screen facilities made auxiliary observations possible, while the basic contacts with the children and their parents were highly individualized. These contacts, moreover, were cumulative, so that children, observers, examiners and parents all came to understand each other. The organic growth of mutual understanding and rapport over a period of ten years or more must be mentioned as an important element in the validity of our investigation.

In spirit and technique our methods were clinical, rather than statistical, or rigorously experimental. We used standardized procedures for measurement and observation, but they were freely supplemented with naturalistic observations, stenographically recorded. In harmony with the clinical approach the procedures were not kept altogether uniform from age to age, but were shifted in context and emphasis to meet the shifting contexts and accents of development. As the child changed with maturity we adapted the procedures accordingly. By noting the form and direction of these adaptations, the outlines of the maturity traits were sharpened. Since we were always dealing with a gradient (that is a progressive series of data) this method of clinical appraisal was essentially comparative and self-corrective. It applied to the information gained by interview, as well as to the direct observations.

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Fifty or more children were examined at 5, 5½, 6, 7, 8 and 9 years, and a smaller number at 10 years. Most of these children were of high average or superior intelligence, and came from homes of good or high socio-economic status. Three-fourths of the children had attended the guidance nursery of the clinic; some had also been developmentally examined during infancy. Nearly all the children attended a public elementary school, and were in this sense representative of a prosperous American community. A special group of 14 children, who attended an excellent private school in a small Connecticut town, were examined at semiannual intervals from six through nine years. These children were not only examined individually, but were observed as members of their schoolroom groups. There were numerous observations and discussions with the teachers relative both to individual and group behavior.

The case-record for each child grew to considerable size before the end of the study. It included for each periodic contact the following materials: a) a psychological examination based on the Yale developmental schedules and Stanford Binet scale, b) performance tests, including the Arthur series, c) reading readiness tests, including Monroe, d) visual skills tests including pursuit fixation, fusion, acuity, etc., e) naturalistic observations of the child's play behavior and incidental postural and tensional behavior, and f) a wide-ranging interview with the mother, concerning behavior at home and school. The incidental, naturalistic observations often proved revealing when brought into relation with the more formalized observations. All the records were carefully analyzed, age by age, situation by situation, and child by child. Percentage frequencies were noted, but were not made the sole basis for the final conclusions, and are not reported in this volume. Sometimes a single, but revealing behavior led to the identification of a significant developmental trend. The ultimate criterion of credibility and validity was developmental:—Does the given behavior have an assignable status in a gradient of growth as indicated by the converging evidence of the total data for all the children of all the ages?

This criterion is frankly clinical, but due care was exercised to secure

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ample objective data. The gradients, the individual items of the gradients, and the growth trends were discussed in detailed conferences. All this involved subjective estimates, but with self-correcting safeguards. The very complexity and diversity of the data required that we use the method of progressive approximation. An unqualified statistical report of frequencies would not have served our purpose. Our task was to make the data intelligible and to extract meanings, so that the reader might gain a better insight into the nature of child development. Although we have made a survey which has taken years of application, our primary purpose is not to report the findings as mere facts, but to give the reader the benefit of what we have learned through the unique opportunities of the investigation. It was a rare privilege to become so well acquainted with a fine group of young Americans.

The construction of the book, therefore, explains itself. For this is a book which was at every step built with the interests of the readers in mind, particularly parents and teachers; also physicians, nurses and others who are professionally responsible for safeguarding the developmental welfare of children from five to ten.

PART ONE is intended to give the reader preliminary orientation to the central theme of development. Growth or development (the two words can be used interchangeably) remains an empty abstraction, unless it is envisaged as a concrete process which produces patterns of behavior. The patterns change in shape and character as the child matures. They can be arranged in growth gradients. To understand the general significance of the years from five to ten, Chapter 1 considers their relation to the total life cycle. The nature of psychological growth is treated in Chapter 2. The mental attitudes of parents and teachers, in turn, depends upon an appreciation of these growth factors, as indicated in Chapter 3.

PART TWO delineates the progressive stages in the growth of the child's mind, by means of a series of cross sectional characterizations. The mental growth of the first four years is summarized in twelve thumb nail sketches. The purpose of this summary is to give foundation and perspective to the portrayal of the years from five to ten. Each of

these yearly age levels is treated more elaborately and always with systematic reference to ten major fields of behavior: §1. Motor characteristics §2. Personal hygiene §3. Emotional expression §4. Fears and dreams §5. Self and sex §6. Interpersonal relations §7. Play and pastimes §8. School life §9. Ethical sense §10. Philosophic outlook.

These ten categories are fairly comprehensive. They were not decided upon in advance. They were the natural outgrowth of the data when the basic records were analyzed. They determine the *Maturity Traits* which are concretely formulated in the double columns of chapters 5, 6, 7, 8, 9. For convenience of reference they are always identified by the same sectional numbers.

The maturity traits are *not* to be regarded as rigid norms, nor as models. They simply illustrate the kinds of behavior (desirable or otherwise) which tend to occur at this age. Every child has an individual pattern of growth, unique to him. The behavior traits here outlined may be used to interpret his individuality and to consider the maturity level at which he is functioning.

Each of the age levels covered in PART TWO is treated as a unit, but not as an independent unit. Throughout we have emphasized the dynamic sequences which preserve the continuity of the total stream of development. The reader who wishes to get acquainted with any given age period will probably be interested to read the two adjacent periods to sense the past and the future trends.

The chief aim of this volume is to impart a sense of growth trends. Although the subject matter is arranged by ages, our purpose has *not* been to set up rigid age norms or a static yardstick. Growth is motion. We should be mainly concerned with the position of the child in a forward moving cycle.

PART THREE deals with the total growth complex. We take the reader onto ten closely connected platforms, so that he may get a panoramic view of the flowing slopes of development, with trends which date back to infancy. The trends are also formulated in tabulated *gradients of growth*. The platforms represent the ten major fields of behavior (Chapters 11-20). Each field constitutes a terrain of growth territory distin-

guishable enough to be considered as a separate topic. To comprehend a landscape one must look at it from varied angles. So these chapters often reveal a single subject in different aspects. It will be found, for example, that motor characteristics affect emotional expression and tensional outlets. They may even enter into the sense of self, and thereby influence interpersonal relations, which in turn concern ethics and school life. It is very important to grasp the unitariness of the growth complex. We hope that the very multiplicity of the growth gradients (over forty in number) and the parallelisms in these gradients will throw light upon the growth process as a living integrated reality.

Here again we would emphasize that the gradients are always relative and not absolute. They are *not* offered as norms of absolute ability, but as approximate norms of developmental sequence. The gradients will become an aid to child guidance only if they are used to locate the position of a child with respect to certain aspects of behavior in the total growth complex. Your problem, as a lay person, is not to measure the mind, but simply to get a sense of direction.

Do not be surprised if you find that your child does some things that are not even mentioned in the book! We know that every child is an individual and that he travels by his own tailor-made time schedule. Nevertheless, we have given you in the characterizational profiles the descriptive maturity traits and in the seriated growth gradients a frame of reference to consult. If you do not use this reference frame too rigidly, it should help to make your child more intelligible; and if he is at all normal, as he probably is, then you will have the reassurance that he is steadily (though not evenly) moving forward to higher levels of maturity. This reassurance will also place you in a better position to give the backward-mindful and forward-constructive guidance best suited to him at one particular phase of his development. And you will always be confronted by a phase at a time! The total ground plan is beyond your control. It is too complex and mysterious to be altogether entrusted to human hands. So Nature takes over most of the task, and simply invites your assistance.

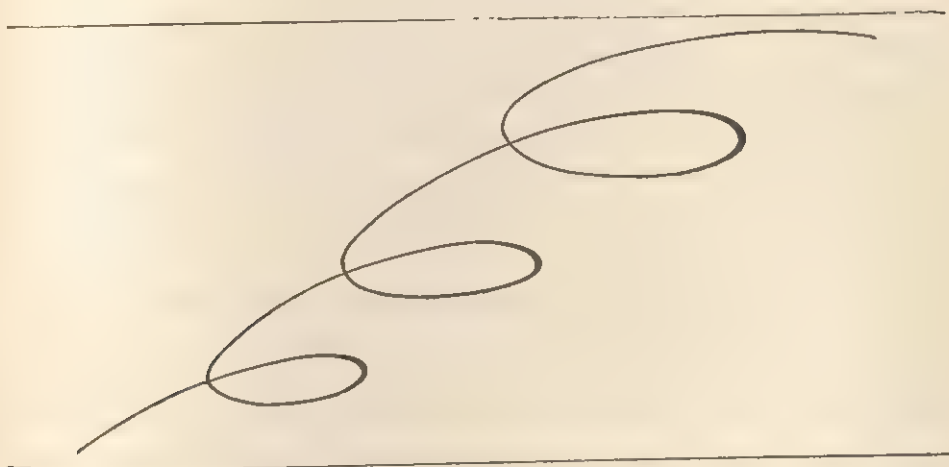
PART ONE



. . Could you tell me
how to grow,
or is it unconveyed,
like melody or witchcraft?

—EMILY DICKINSON
(1862)

THE CYCLE OF DEVELOPMENT



THE years from five to ten occupy an important position in the scheme of human development. To appreciate their significance we may look down two vistas; one vista reaches into the past, the other into the future. A diagram will help us to see these middle years of childhood in true perspective.

It takes, on the average, somewhat over twenty years before a newborn infant becomes an adult. Birth was itself preceded by ten lunar months of growth in which the zygote became an embryo, and the embryo a fetus. Soon after the beginning of the fetal period, that is, eight weeks after conception, the nervous system and the muscular system show signs of organization. The fetus stirs with body, head, arm and leg muscles. Presently eyes and hands become active with mild but patterned movements. By the twentieth prenatal week the future infant is

already in possession of the billions of nerve cells which are to govern his behavior throughout life.

As early as the eighth week of intrauterine life the beginnings of the differences between a boy and a girl become recognizable. Long before birth the future infant is already stamped with individuality. Every child is born with potentialities which are peculiar to him or to her. Each child has a unique pattern of growth, determined by these potentialities, and by environmental fate.

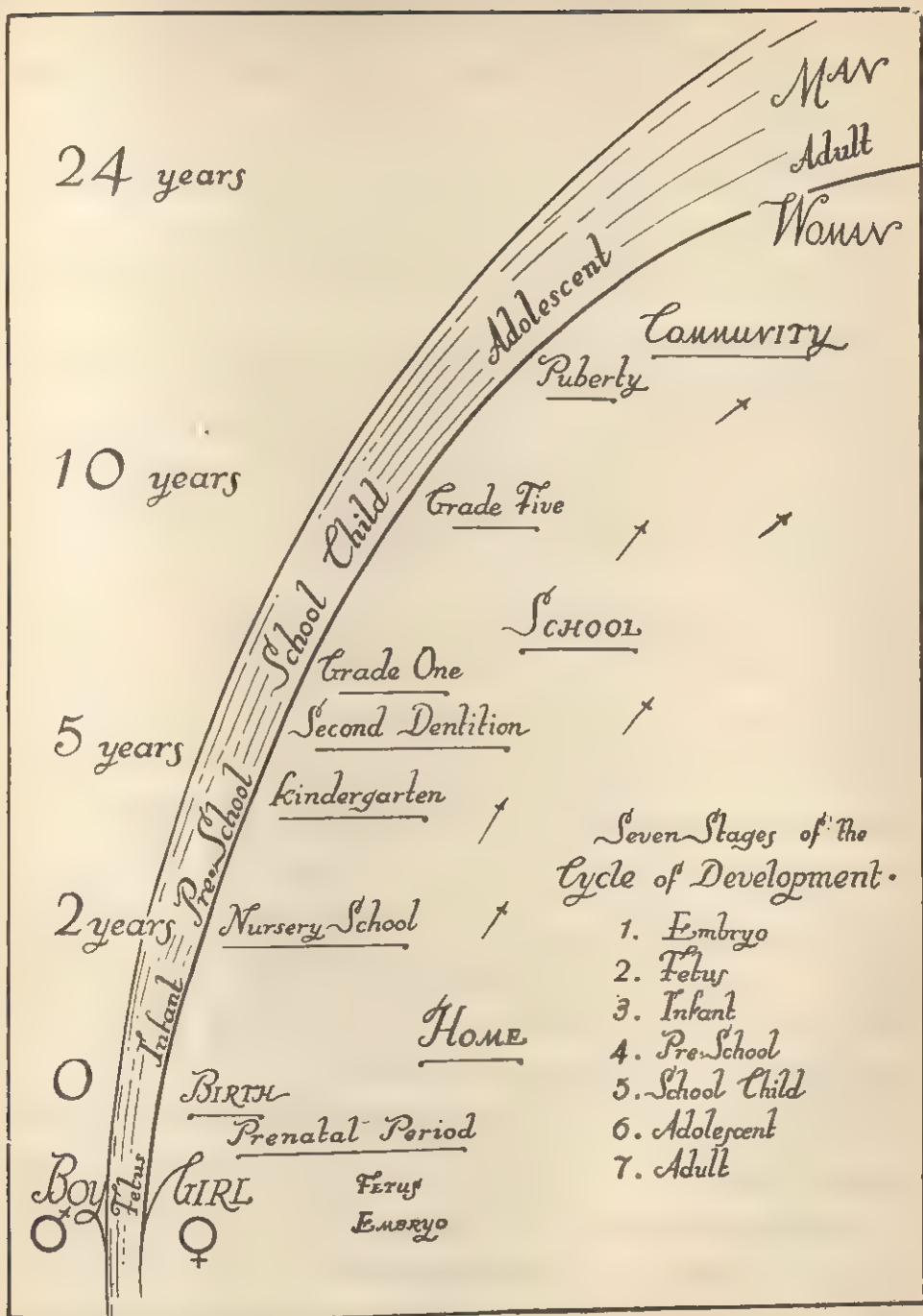
There are, however, certain basic traits and growth sequences, which are typical of the human species in a modern culture. These general characteristics are indicated in the accompanying diagram, which is so drawn that one may look into the long vista which stretches toward the future, and also into the deep vista which reaches downward into the formative past.

The general course of development is similar for girls and for boys. But girls mature somewhat more rapidly and earlier. Our diagram, therefore, shows two separate curves.

Seven stages are pictured. They correspond only partly to Shakespeare's seven ages of man. The distant stages of senescence and senectitude are not included. Emphasis is placed on the progressive developmental advance which proceeds as follows:

- 1) Stage of the Embryo (0-8 weeks)
- 2) Stage of the Fetus (8-40 weeks)
- 3) Infancy (from birth to 2 years)
- 4) The Pre-School Age (2-5 years)
- 5) Childhood (5-12 years)
- 6) Adolescence (12 to 20-24 years)
- 7) Adult maturity

Man, of all creatures, has the longest period of relative immaturity. He is so complex that it takes him over twenty years to grow up, physically and mentally. Not without reason is the right of franchise in our democratic culture postponed to the age of twenty-one.



The years from five to ten occupy a middle position in this long span of immaturity. These middle years are intermediate both in a biological and in a cultural sense. During them the child sheds his milk teeth, a biological event. At six years he cuts his first permanent tooth, a molar at that. We may call it a school-entrance molar for it punctuates his induction into the elementary school system, which is a sociological event.

Puberty is the next great landmark on the pathway of development. It marks the beginning of adolescence, which continues for some ten years, until the attainment of maturity. They are years of completion; the first five years of life are years of preparation. The middle years of childhood lie between. They can be understood only in terms of the past in which they are rooted, and in terms of the future toward which they trend.

Being intermediate years they lack the dramatic vividness of infancy on the one hand and of adolescence on the other hand. In consequence the psychology of the five to ten period has been somewhat slighted by elision. The literature reflects a tendency to generalize for the period as a whole without recognizing the age differences within the period. The elementary school to be sure, promotes its children on an annual basis; but curriculum and methods are too largely determined by a narrow psychology of learning instead of a liberal psychology of development. The institutional pressures of the school tend to obscure or to overlook both the individual and the age differences in growth processes. The child is not only advancing in strength and skills, but he is changing in the interior patterns of his private psychology.

Knowing too little about these subtle and hidden changes, parents are prone to blame the school for maladjustments; and teachers in turn are prone to blame child and parent. Often no one is to blame. Ignorance of the ways of growth lies at the basis of many of our difficulties. If only the child himself could tell us more about how he feels, how he thinks, how he acts. We judge too much by the superficial evidences of

"success" or "failure," and then further distort our judgments by an overweening attitude of competitiveness projected upon the child.

Here, again, more insight into the laws and the concrete ways of growth will humanize our adult-child relationships. We shall find that even such a simple (?) task as the recognition of words on a printed page is not so simple that it can be solved through sheer drill and training (with a little discipline, and not too much nonsense!). The function of visual perception in man equals that of speech in its unique complexities. We have much to learn about the development of this function in its manifold relations to life and education. The alarming increase of visual defects and reading disabilities in the early school years testifies to the complexities of development in these years.

Perhaps we have exaggerated the perturbation of adolescence and also the steadiness and stability of childhood. More goes on than frankly meets the eye between five and the teens: there are alternations of relative equilibrium and of transitional disequilibrium; there are rhythms of accent in introverted versus extroverted activity, in home versus school, in self versus group interests, in fine motor versus gross motor movements, in the to and fro shifts, in the delicate controls of eye movements. Only by identifying the developmental shifts in such counter-balanced traits can we arrive at a more accurate picture of what these somewhat inscrutable boys and girls are really like. Development does not advance on a straight line.

Whence come these developmental trends and fluctuations? They are not the product of the contemporary environment; they are primarily the expressions of the ancient processes of evolution. Man was not made in a day. It took vast ages to bring to their present form his capacities to walk, to talk, to manipulate with his hands, to contrive with his brain, and to see with such rich perception, and to foresee with far reaching imagination. In some condensed way the child must retrace these immense ages. This too takes time. His organism must gather up and reweave the essential ancestral threads. In the vast complexities of his nervous system he matches the vastness of his ancestral past.

At the age of five he has already come a long way. He has surmounted a hilltop. He is no longer a mere baby. He is "a little fellow"! He is almost self-dependent in the elementary routines of life at home. He is ready for the simple community life of a schoolroom. In his emotional traits, in his general intelligence and adaptability he evinces a well organized, well rounded action-system. It is as though Nature had momentarily completed what she undertook to create. The 5-year-old at least presents a preliminary version of the ultimate adult. Perhaps he registers in a dim way what was once a plateau of full maturity in the remote racial past.

Five, therefore, is a nodal age. For a brief period the child remains in a phase of balanced adjustment to himself and to his environment. It is as though his problem of development had been solved. But the push of growth and the pressure of cultural demands build up new tensions. Sometimes these demands are excessive. It is as though the culture were bent on appropriating the child. He on his part is also bent on assimilating the culture; because, of course, he is destined to graduate from his five-year-oldishness.

It is not, however, easy to strike a smooth and steady balance between himself and his multifarious environment. At six years, he seems less integrated than he was at three years. He is more like the 2½-year-old child, who has not fully found either himself or his environment and is therefore in a fluctuating two-way equilibrium. The 6-year-old likewise is in a bipolar phase, trying at one and the same time to find himself and to find out his new environment. Choice and reconciliation between the two poles create tensions and hesitations. He is solving new problems of development. This is the key to understanding some of his difficulties and instabilities at the threshold of his formal education.

The 7-year-old has himself better in hand. He shows less lability, and a greater capacity to absorb and organize his new cultural experiences. He establishes more firm relationships with his companions and his teacher. He is decidedly more unipolar. He is better able to take what comes. There is less disequilibrium. This is, comparatively speaking,

an absorptive and assimilative phase. Day by day he grows in mental stature.

By the age of eight, the budget of income and outgo shows new balances. The child has built up a firmer body of experience and is able to give as well as to take. He shows more initiative and spontaneity in going out to meet the environment. He can fraternize with his co-equals. At nine he is detaching himself still more from apron strings, and domestic tethers. With a mounting indifference to his elders when he is away from them he dwells in a culture of his own selection.

By the age of nine and ten this indifference reaches new heights. Boys and girls alike are amazingly self-dependent. Their self-reliance has grown, and at the same time they have acquired intensified group feelings. Identification with the juvenile group promotes the complex process of detachment from the domestic family group. This is part of the method of maturing.

At the same time the divergence between the two sexes is widening. By the age of ten, the tendency toward segregation is well defined. Girls, somewhat earlier than boys enter upon the pre-pubertal period, marked by changes in body proportions, metabolism and endocrine secretions. These changes become yet more marked during adolescence, which is a prolonged period of diminishing immaturity. The child thus becomes a youth, the youth an adult.

For boys the stage of adolescence lasts about ten years, for girls a year or two less. Adolescence, therefore, is almost as long as infancy and childhood combined. From a cultural standpoint it is an extremely critical period; because it is that time of life when youth is progressively initiated into the responsibilities of citizenship and into the meaning of marriage. With marriage the first great sector of the cycle of development comes to full circle. For then a new home is founded. A new infant is born. A new generation starts on its life career, which again pursues the age old sequence of infancy, childhood, adolescence and parenthood.

We can scarcely expect the carefree child to contemplate the full

sweep of this cycle of development. He is deeply immersed in the present. Parents and teachers must make up for his lack of foresight. Being adults they can better understand the scope and the trends of the cycle. They can have confidence in these trends; they can use knowledge and skill to direct the trends. In countless ways they can give infant, child and youth intimations of the future which is in store.

For all these reasons it is extremely important that teachers and parents should see the whole cycle of development in its imposing perspective. A developmental outlook upon the everyday problems of child behavior imparts meaning and dignity to these problems. It lessens their irritation. We cannot comprehend child life with a sense of proportion or of humor unless we see that life through the stereoscopic lenses of development.

When we put on those lenses we see things in their third dimension: the shortcomings, the strivings, and the immaturities of children take on new meaning. Each child's behavior is then appraised in terms of *his* development history, and *his* unique patterns of growth. External pressures will be modulated to *his* changing growth needs. He will be reared through guidance based on sympathetic understanding.

The purpose of this volume is to increase understanding. We begin with a panoramic view of the cycle of development. We see the broad sequences which are characteristic of the human species in general. Within these sequences are many variations of emphasis and patterning which lie at the basis of individuality.

There is also a pageant of the changes that come with the years. In later pages we shall characterize these changes in some detail. None of the changes are ushered in with dramatic abruptness, and there are numerous personal variations in tempo and in timing. But it will be profitable to delineate the changes, so that we may have a frame of reference which will bring the growth processes into focus.

This makes it necessary to adjust our own interpretive lenses from year to year; because the 6-year-old child is significantly distinguishable from the 7-year-old, and the 7-year-old in turn from the 8-year-old.

When we can define the trend of these year-by-year differences we can adapt our practices and our expectations to the nature and the needs of the individual child.

How else can we avoid the ever present dangers of authoritarianism in home and school? How else can we realize the spirit of democracy, which above all pays tribute to the dignity of the individual?

2

THE GROWING MIND



"I wish to understand my child." This is the desire of every right-minded parent. "I wish to understand so far as possible the individuality of each of my pupils." That is the goal of the modern teacher. Such understanding requires some appreciation of *how the mind grows*. This book deals with the minds of growing children.

The mysterious relationships between mind and body (sometimes

called psyche and soma) need not concern us. It is enough to know that the psychology of the child, which includes all of his behavior, is inseparably bound up with his nervous system, and indeed with his entire organism. We cannot separate "the mind," from the total child; and it would lead us far astray if we considered the psyche to be an occult force, which operates behind the scenes. The child is a unit.

The nervous system makes him so. It consists of multi-billions of neurons which connect with every sensitive and every moving part of the whole organism. Vegetative neurons pervade blood vessels, heart, lungs, gastro-intestinal tract, genito-urinary organs, the sphincters of rectum and bladder, the mucous, sweat, salivary and tear glands and the ductless glands of internal secretion. *Sensory neurons* supply countless end organs of skin, mucous membranes, joint surfaces, tendons, and a dozen highly specialized organs of sense, of which vision is the most intricately contrived. *Motor neurons* supply the extensive muscular system, which numbers some 600 paired muscles and many billions of contractile fibrils. *Associative neurons* register, coordinate, inhibit and organize the immense internal traffic of the entire system into patterns of memory, speech, imagery, symbolism and volition. Whether we think in terms of chemistry or of electronics we can envisage the human action-system as a vast network of wired and wireless arrangements which make the infant a prodigious creator and the child a marvelous walkie-talkie.

The growing mind is part and parcel of this vast network of living tissue. The mind grows because the tissue grows. Neurons have prodigious powers of growth. They multiply at a rapid rate in the embryonic period and fetal period when the foundations of behavior are laid. The 5-month-old fetus is already in possession of the full quota of twelve or more billions of nerve cells which make up the nervous system. These cells continue to grow and organize throughout the cycle of development.

One may think of the child's mind as a marvelous fabric of some kind,—a growing fabric. Physically its structure is represented by a

great maze of nerves and nerve tracts, and a microscopic feltwork of branching fibers and exquisite fibrils. Functionally the mind consists of propensities and patterns of behavior. We cannot see the underlying feltwork; but we *can* see the outward behavior patterns. These patterns have so much design and are so lawfully related to each other, that the mind is indeed comparable to a fabric which is richly woven and interwoven,—an organic fabric which continues to *grow*, creating new patterns while it grows.

Parents and teachers who think that a child is so plastic that he can be made over by strenuous outside pressure, have failed to grasp the true nature of the mind. The mind may be likened to a plant, but not to clay. For clay does not grow. Clay is moulded entirely from without. A plant is primarily moulded from within through the forces of growth. The present volume will stress these forces.

Intelligent guidance begins with the concept of growth. To understand a child whether in infancy or in the school years, one must become acquainted with the gradients of growth which determine the trends and patterning of his behavior.

What is a growth gradient? It is a series of stages or degrees of maturity by which a child progresses toward a higher level of behavior. A few concrete illustrations will show how growth gradients operate in the first year of life, in the pre-school years, and also in the years from five to ten.

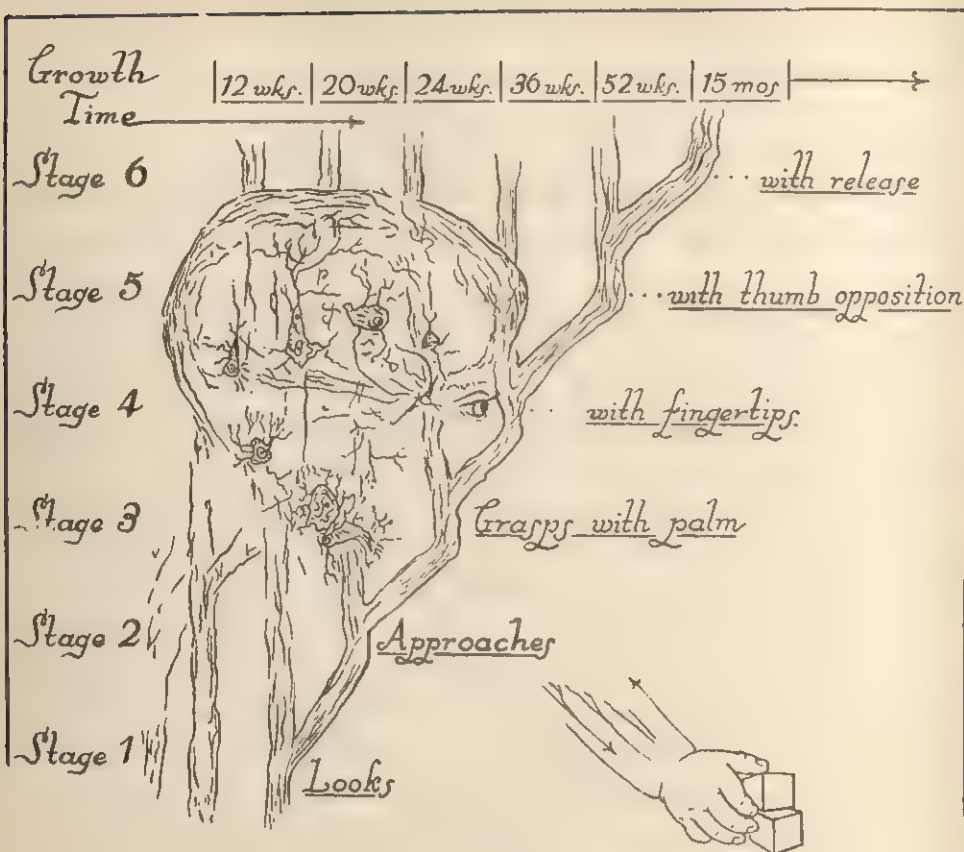
For example, during the first year of life a baby acquires the ability to pick up objects. This is a very important part of his behavior equipment. It takes a long time to mature the muscle and neuron connections necessary for prompt and precise prehension. We can test these growing powers of *Prehension* by placing a little red cube before a baby. At first he can "pick up" the cube only with his eyes, but not with his hands. Reduced to simplest terms this growth gradient runs as follows:

PREHENSORY BEHAVIOR

- 1) *12 weeks* Looks at cube.
- 2) *20 weeks* Looks and approaches.
- 3) *24 weeks* Looks and crudely grasps with whole hand.
- 4) *36 weeks* Looks and deftly grasps with fingers.
- 5) *52 weeks* Looks, grasps with forefinger and thumb and deftly releases.
- 6) *15 months* Looks, grasps, and releases to build a tower of two cubes.

This simple gradient exemplifies the basic mechanism of all psychological development,—not only the mental growth of the infant but also that of the school child. Let us, therefore, examine a little more closely how the patterns in this particular growth fabric are built up. Recalling that the mind grows not unlike a plant, we have drawn a tree-like diagram to show how the patterns of prehensory behavior elaborate and differentiate by branchings and sub-branchings. Each new pattern grows out of the old and yet retains a connection with the old. The final pattern of tower building is a condensed culmination of all the growth that went before. The gradient begins with the comparatively simple pattern of looking. With increasing maturity one refinement follows another in lawful sequence: 1. Ocular focus 2. Arm approach 3. Manual grasp 4. Finger grasp 5. Release 6. Tower. At 15 months the infant unreels this sequence in a flash, but this skillful flash of behavior is the patterned end-product of a whole year of constructive growth.

All school skills have a similar pre-history of growth. They are always subject to the principle of developmental readiness. They are never the sole product of training or drill. For example consider another simple six step gradient in the field of *Reading Behavior*. The 15-month-old child who has just attained the sensori-motor skill of building a tower is also at the lower threshold of reading. He can already help to turn the pages of a picture book. He can definitely identify the circular hole in a circle-triangle-square form board. Surely this is the growth rudiment of the capacity to recognize the round letter O, which is the beginning of all reading! Moreover he can read some of the pictures of a book



A symbolic diagram of the growth processes which underlie the patterning of behavior. Six stages in the development of prehensory behavior are pictured: 1. At 12 weeks the infant merely looks at the cube; 2. at 20 weeks he approaches it with a bent arm; 3. at 24 weeks he grasps it with a palmar squeeze; 4. at 36 weeks he grasps with his fingertips; 5. at 52 weeks with forefinger and thumb opposition; 6. at 15 months he both grasps and releases adaptively; placing one cube upon another. He builds the tower in a twink. The twink is based on 15 months of post-natal growth time.

These reactions are made possible by patterned connections between countless neurons and muscle fibers. The connections are symbolically represented by the outgrowths of variegated neurons in brain and spinal cord. Neurons sprout and grow not unlike plants and trees. They put forth branches, sub-branches, end-tufts and terminal arborizations. Threadlike fibrils extend from fingertips to cord and to cortex. A million nerve fibers unite the eye to the vastly complex jungle of neurons in the cortex. This living, patterned and patterning tissue affords an intimation of how the mind grows.

to this extent: He pats a picture which he recognizes. Our illustrative growth gradient begins with that pattern of behavior,—an elementary perception of a picture on the printed page.

READING BEHAVIOR

- 1) 15 months Pats identified picture in book.
- 2) 18 months Points to an identified picture in book.
- 3) 2 years Names 3 pictures in book.
- 4) 3 years Identifies 4 printed geometric forms.
- 5) 4 years Recognizes salient capital letters.
- 6) 5-6 years Recognizes salient printed words.

The ages assigned to the stages in the foregoing gradient represent average, normative trends. All gradients are subject to individual variations, with respect to age values, but the sequence of a gradient tends to remain the same for all children in spite of such variations. As we shall demonstrate later in this volume growth gradients have a double usefulness: a) they define the developmental traits characteristic of childhood in general; b) they enable us to determine in an individual child the attained levels of maturity for these traits. In this way we become acquainted both with the individual and with the group to which he belongs.

As a child grows older his patterns of behavior become more complex, and they seem to embody to an increasing degree the impress of cultural influences. The mechanisms of development, however, do not change; and the child remains true to his own unique patterns of growth and of adaptation. We may illustrate this with still another six step gradient which outlines certain progressions in the field of *Acquisitive Behavior*. Under this term we include patterns and propensities which concern the appropriation and ownership of things, and the collection of possessions.

This acquisitiveness gradient no doubt ought to begin with prehensory behavior, because the infant is a very grasping creature! He seizes and holds objects with intense avidity. Often he resists removal of an

object which he has acquired; but his possessive relation to the object is so fleeting that we scarcely think of him as an owner of his toys! They simply "belong" to him. He does not have a strong sense of personal ownership. In the 5-year-old child, however, we see a personal pride in *his* belongings, which bespeaks an altogether higher form of acquisitive behavior. The growth gradient for the next five or ten years runs somewhat as follows:

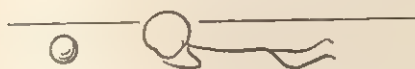
ACQUISITIVE BEHAVIOR

- 1) 5 years Takes pride in certain personal possessions
(e.g. hat or a drawing of his own).
- 2) 6 years Collects odds and ends rather sporadically
(e.g. Christmas cards).
- 3) 7 years Collects with purpose and specific, sustained interest
(e.g. postal cards).
- 4) 8 years Collects with zeal and strong interest in size of collection
(e.g. comics, paper dolls).
- 5) 10 years Collects more formally with specialized, intellectual interests
(e.g. stamps).
- 6) 15 years Saves money with discriminating thrift and interest in money values.

Analysis of the foregoing gradient will show that the cultural determinations are not as powerful as they appear to be on the surface. To be sure hats, postal cards, comics, stamps and moneys are cultural goods. But the value which the child instinctively places on these goods, how he collects and cherishes them, how he disposes of them,—all this depends upon his developmental (and temperamental) characteristics. A similar relationship between maturation (biological) and acculturation (environmental) will prove to hold in all fields of behavior. The primary growth gradients hold the key to the wisest methods of guidance and education.

In PART THREE of this volume we shall assemble numerous gradients, covering a wide diversity of behavior areas. The developmental patterning of personality, as well as the growth of school abilities and of

A LOCOMOTOR GRADIENT



A. Lifts head

X



B. Swims

X



C. Pivots

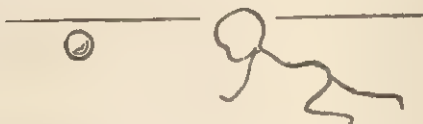


D. Crawls backward



E. Kneels

X



F. Creeps backward



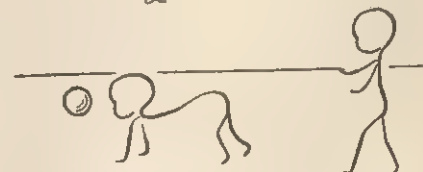
G. Rocks



H. Creep - Crawl



I. Creeps



J.-K. Gets on feet



school interests will be included. It is hoped that a study of these varied gradients will impart substance to the reader's envisagement of the child's mind. The nature of that mind eludes us unless we manage to think of the psyche as a growing, organic action-system, patterned in all its arrangements, both latent and manifest. Profound laws govern the forms and the sequences of those patterns. The significance of any child behavior must be adjudged in terms of its form and of its position in a sequential gradient.

The growth gradients are frames of reference which can be used to locate the stage of maturity which a child has reached in a given field of behavior. The gradients are not applied to ascertain a mental age, or to measure the child in an arbitrary way. The purpose is rather to find his approximate position in various sequences of development. That enables us to estimate the developmental ground he has already gained and the ground which lies just ahead. Educational and guidance measures can then be adapted to the maturity of the child. Failure to interpret his maturity status leads to waste effort, to harmful interference and unjust discipline.

Sometimes, of course, the child's behavior is so unexpected and so contradictory that it is very difficult to understand. He may even seem to go backward when the growth gradients demand that he should go forward. In such a situation, whether it arises at home or at school, it is especially important to interpret the problem in terms of development. It must be remembered that the mind does not grow on a straight and even front. The course of development is uneven (in some children more so than others). It zigzags, and sometimes it spirals backward in a way which suggests retreat and regression. But if the child is normal, the ultimate and all-over trend is toward a higher level of maturity. Development is like a stream; it carves the best possible channel; it flows onward; it reaches a goal.

A child may be making good progress even when his development seems to be taking a devious course. This is transparently shown by the manner in which a baby learns to creep. Careful observation has dis-

closed that a baby goes through some twenty stages or sub-stages in achieving this locomotor ability. Ten of these stages are pictured in the accompanying pictographic gradient. The developmental goal is forward locomotion, prone progression on all fours. But note how often the behavior at a given stage seems to disappoint the goal and even goes contrary to it. Yet in due season the child scoots across the floor on hands and knees, then on hands and feet, and yet later on feet alone.

The following stages are depicted in the diagram (over a dozen intervening stages are omitted):

Stage	Behavior Pattern	Progression	Code
A	<i>Lifts head—legs passive</i>	None	x
B	<i>Swims</i> (head rears, legs extend)	None	x
C	<i>Pivots</i> (arms alternately flex and extend)	Circles	x
D	<i>Crawls backward</i> (arms push)	Backward	→
E	<i>Kneels creepwise</i> (lifts trunk)	None	x
F	<i>Creeps backward</i> (lowers trunk)	Backward	→
G	<i>Rocks</i> (in high creep position)	Oscillates	↔
H	<i>Creep-crawls</i> (pitches forward)	Forward	←
I	<i>Creeps</i> (on hands and knees)	Forward	←
J	<i>Creeps plantigrade</i> (on hands and feet)	Forward	←

From the foregoing sequence, which is virtually universal for the human species, it is clear that Nature does not always go directly to her goal. She takes a round about path, and sometimes she seems to be poised midway as though she did not know where to go! At stage G the child is all set to go places, but instead he rocks back and forth, oscillating between two alternatives. At stage C he spun around in a circle; at stages D and F he actually went backward; at other stages he remained completely on location. And yet when we view the entire gradient in perspective we know that he was making *developmental headway* all the time, even when he was pushing himself backward. Nature has a devious cunning which is beyond our logic.

The child is so closely in league with Nature that we must respect his innate gradations of growth. Who would think of punishing an

infant because he propelled himself backward instead of forward, or because he vacillated between forward and backward; or because he combined crawling and creeping patterns instead of adopting the "proper" method of locomotion?! In the naive immaturities of his prone behavior, we see that Nature herself needs time to refashion in the individual a complex type of behavior, which required aeons of evolution in the race.

The patterning of prone behavior supplies an instructive example of the mechanisms which govern child development at all ages. The baby betrays his immaturities as he solves the problems of locomotion. When he becomes a school-beginner he will be confronted by other problems, but he will exhibit comparable immaturities. In his writing he will go in wrong directions, he will produce astonishing reversals, and at times he will seem to make no progress at all. But ultimately he achieves the necessary coordinations of posture, eyes and hands to enable him to write straightforward. His rate of progress will always depend primarily upon the maturity of his nervous system. It is doubtful whether he should be "disciplined" for his motor shortcomings. And in interpreting his "failures" in writing, reading and arithmetic, it is well to recall the tortuous gradations by which the baby "learns" to creep.

From this preliminary discussion it is clear that the significance of a child's behavior depends upon the position of that behavior in a developmental sequence. In any given situation we ask: What growth preceded? What growth is likely to follow? In the management of children, we do not so much need rules of thumb; we need orientation. Growth gradients will give us bearings in the latitude of maturity levels and in the longitude of age.

As a child advances in age, he not only gains in height and weight, but his body proportions, and even his body chemistries undergo change. Most importantly of all, his behavior equipment changes. The changes are gradual; so gradual, indeed, that they often escape notice. They come as softly as a thief in the night.

For this very reason it is advantageous to demarcate the changes in a

way which will make them evident. This we have attempted to do in PART TWO. For each year from five to ten, we have drawn up a type portrait which delineates the distinctive behavior characteristics of that age. It is not assumed that this portrait will snugly fit any one child; but it will suggest the traits by which he may be appraised. A series of such annual portraits will also define the concrete trends toward maturity. Just as the eye needs two overlapping images in order to see depth, so we need two adjacent maturity levels to secure a stereoscopic view of the child's development.

These year by year behavior profiles provide the basic points of departure for the growth gradients assembled and partly codified in PART THREE. The profiles outline a total behavior picture. The gradients may be used analytically, singly and in various combinations. They are designed to serve as *interpretational devices*. Properly applied they will help the adult to appraise the problems of growth with which every child is faced. The child can scarcely formulate his problems for us. We must watch his behavior and use it as a clue to understanding. If he reverses his digits he may well be in the equivalent of a backward-crawl stage in locomotion.

A growth gradient may tell us where he has arrived and whither he is trending. By applying several gradients to their several fields of behavior, we get a better view of his total maturity status. We may even get an indication of his strongest assets,—and his characteristic liabilities if he has any. We do not necessarily expect him to be equally advanced in all behavior fields. We know that there are many entirely normal variations in the chronological age at which school abilities are attained. We know that every child has a unique pattern of growth. And just because basic development proceeds in sequences which are nearly universal, the growth gradients help us to discover and to describe that unique pattern.

The child is his own best norm. He is never so much like himself as when he is changing, because his growth characteristics are the truest index to his individuality.

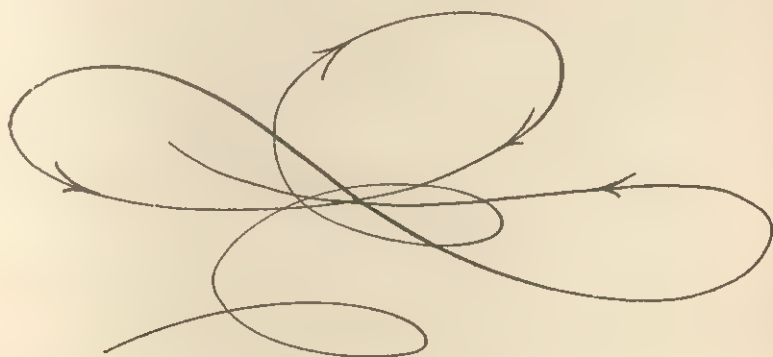
Growth gradients also tell us something about the psychological differences between boys and girls. Girls are more advanced and more generalized in some types of behavior. Boys are more intense and more channelized; for example, in certain aspects of acquisitive behavior. Some of these differences are subtle, but they are significant and they should influence our attitudes as parents and educators.

Growth gradients deal with relativities rather than absolutes. Nothing can be more misleading than an absolute, particularly in the management of children. Absolutism leads to authoritarianism and this in turn leads to blindness,—a blindness toward the developmental status and to the developmental needs of the child. From an absolute standpoint “stealing” is always *stealing*, but even a crude use of a simple gradient of acquisitive behavior will indicate that there is a difference between the “pilfering” of a 7 year-old and a specific “theft” of a 10-year-old.

Growth gradients therefore, make possible a developmental outlook upon the frailties of human efficiency and of childhood conduct. Far from encouraging a policy of indulgence, a developmental philosophy re-enforced by concrete growth gradients will make us more alert to the developmental needs of children. Such a philosophy has far reaching implications for the harmony of relationships between parent, teacher and child.

3

THE PARENT-CHILD-TEACHER RELATIONSHIP



WHEN a baby is born he is still almost completely merged with the cosmos. Which is to say that he has no sense of self-identity, no sense which distinguishes between the *World of Things* and the *World of Persons*. As he matures he gradually makes distinctions. He learns to discriminate between what is animate and inanimate. Slowly he discovers his physical self. He becomes dimly aware of his personal self. He discovers his parents. He differentiates friends from strangers, children from adults, aggressors from benefactors. He finds that he is a personal agency who acts and is acted upon.

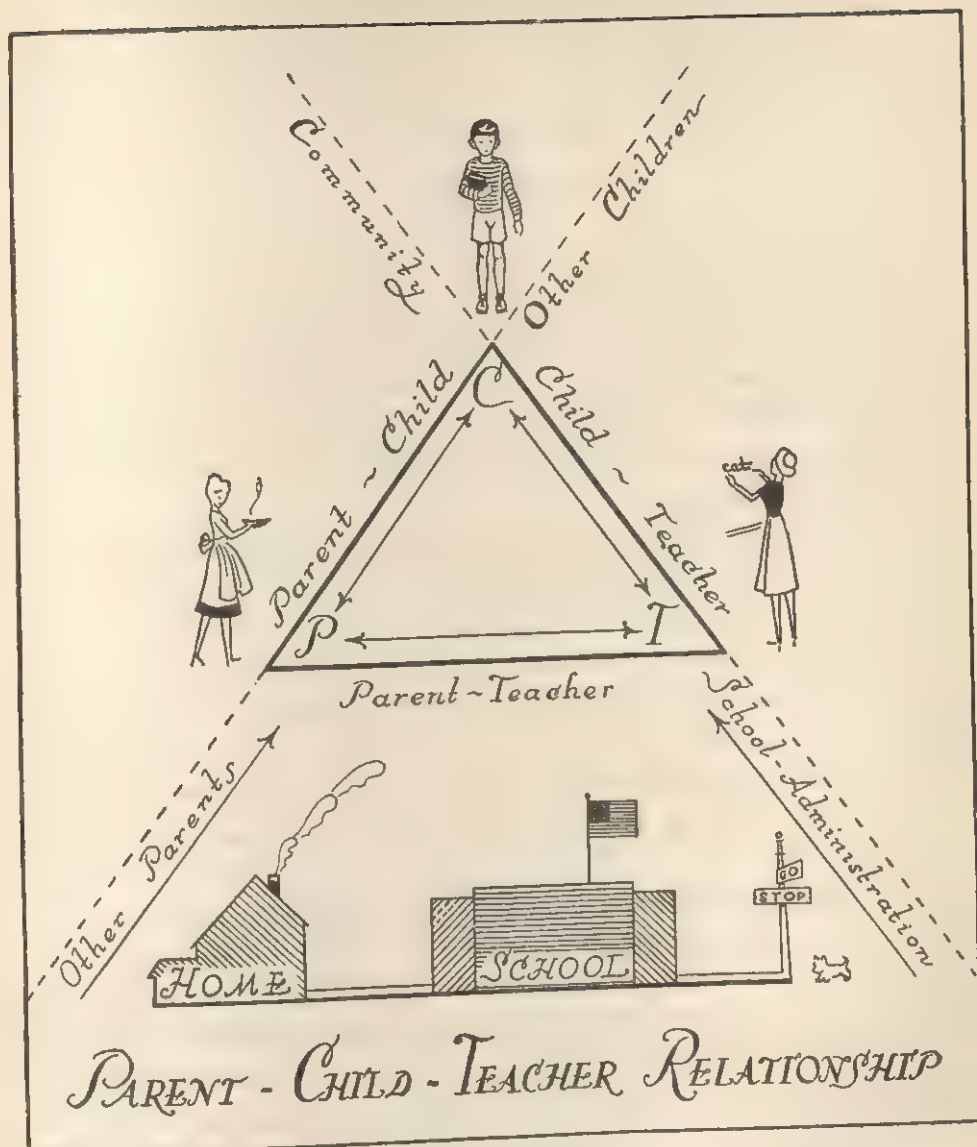
He does not say all this in words, but he builds interpersonal attitudes into his growing personality, chiefly through his experiences with other persons. Indeed his personality is the end-product of all the interpersonal relationships in which he becomes involved. When this intricate web of relationships is wholesome, his personality tends to be wholesome. Needless to say the basic organization of personality takes place in the first five years of life.

The parent-child relationships of family life, therefore, are of determining importance in the early patterning of personality. A well ordered home which provides normal parental care is the best guarantee of mental health in the growing child. The school naturally can accomplish maximum results only when it works in harmony with such a home. But this should be a two-way harmony, with the child more than an innocent bystander. In fact the child from five to ten is at the apex of a triangle of interpersonal forces. Life apparently would be easier for him if he had to adjust only to his parents or only to his teachers. But he has to adjust to both sets of adults. Sometimes the task is doubly difficult when the home and the school adults fail to see eye to eye. The adjoining diagram with its two-way arrows shows the triangular field in which all these interpersonal forces function.

Perhaps the best way to understand the meaning and mechanism of the teacher-pupil relationship is to compare it with its prototype, namely the relationship between parent and child. What are the similarities? What are the differences?

(1) The parent-child relationship is based on heredity, or kinship. The teacher-child relationship is based upon authority conferred by the State. This authority is very august. From an educational standpoint it confers upon the teacher a certain advantage, because it puts him or her in a position to regard the problems of child development in a realistic manner.

(2) The size of the teacher's "family" is large. This, of course, confers a fundamental advantage upon the parent-child relationship. But when we recall that only a portion of the parent's time can be directly devoted



A diagrammatic representation of the interacting relationships of Parent (P), Child (C), and Teacher (T). The position of the child is focal. His welfare is affected not only by his relations with parent and with teacher, but also by the mutual relationships of teacher and parent. The outlook of parents and teachers is in turn influenced by the community, which in its turn determines the standards and policy of school officials. The professional status and practices of the teachers are greatly influenced by the character of the school administration.

to the task of rearing children, we see that the advantages are not all in favor of the home. The teacher, moreover, has the tremendous psychological reinforcement which comes from the impact of the school group upon the individual child. She can use the group to influence the child.

(3) The intimacy and restricted size of the home give the natural parents a maximum opportunity to become acquainted with the characteristics of their children. But here again the teacher is not at a complete disadvantage if she has been professionally trained to perceive individual differences. Moreover, the teacher observes the child as a member of a social group. This brings to light characteristics which the home cannot reveal.

(4) During the early school years the emotional bonds between parent and child are more intense than those between teacher and child. A wise teacher respects this difference and does not try to function as a substitute mother. She has an enlightened Platonic affection which she metes out to assist the developmental needs of her pupils, apportioning more to some than others. Hers is a wholesome, human friendliness. Unfortunate the child who attends a schoolroom where the very atmosphere is so unhomelike and so domineering that his sense of security is weakened.

The authoritarian schoolroom, like the authoritarian home of an earlier day has become inconsistent with the spirit of democracy. Since the second Great War we realize that the sources of the democratic spirit are to be found in the homes and the schools of the people,—in the interpersonal way of life which prevails in the parent-child and teacher-child relationships. Do not children need discipline? Yes, but discipline being a mode of government can be either autocratic or democratic in method. It can defy the laws of development. It can humanely defer to them.

If then we analyze the psychology of enlightened parent-child and teacher-pupil relationships we find three common components, namely:

- 1) Considerateness, 2) A sense of humor, and 3) A philosophy of growth.

1) *Considerateness*. Considerateness is the first essential. The very word considerateness conveys the idea of respect for the dignity of the individual. Considerateness, it has been well said, is in itself a social system. It certainly favors the development of democratic attitudes.

If parents (and teachers) begin with the assumption that they can make over and mould a child into a preconceived pattern, they are bound to become somewhat autocratic. If, on the contrary, parents begin with the assumption that every baby comes into the world with a unique individuality, they are bound to become more considerate. For their task will be to understand the child's individuality and to give it the best possible chance to grow and find itself. The same holds true for teachers.

Considerateness, as we use the term here, is not merely a social or domestic grace. It is something of an art, a kind of perceptiveness and imaginativeness, which enables one person to understand the attitudes of another person. It is an alert kind of liberalism which acknowledges distinctive characteristics in other individuals. It is an active form of courtesy.

2) *A sense of humor*. Fascist government is not distinguished for a sense of humor. It is so distinguished for lack thereof that we may well believe that a sense of humor has some significance for democracies.

The sense of humor is a pliant sense of proportion. Its function is to keep the individual from becoming mechanized and hardened. It is a play of the mind akin to the spirit of freedom. When a teacher has it she protects her own mental health and that of her pupils. Humor is a safeguard against undue tensions and the severities of unwise discipline. An over serious schoolroom violates for children the Jeffersonian right of pursuit of happiness.

3) *A philosophy of growth*. The child's personality is a product of slow and gradual growth. His nervous system matures by stages and natural sequences. He sits before he stands; he babbles before he talks; he says "no" before he says "yes"; he fabricates before he tells the truth; he draws a circle before he draws a square; he is selfish before he is

altruistic; he is dependent on others before he achieves dependence on self. All his abilities, including his morals, are subject to laws of growth. The task of child care is not to mould the child behavioristically to some pre-determined image, but to assist him step by step, guiding his growth.

This developmental philosophy does not mean indulgence. It is instead a constructive accommodation to the limitations of immaturity. Lacking such a philosophy, a teacher may use harsh methods of discipline, and false methods of instruction, designed to subdue her pupils and to bring them to a uniform level. Lacking such a philosophy, a parent may unjustly accuse the teacher for not keeping her child up to standards of achievement and of conduct.

Sometimes teacher and parent alike fail to understand that the child's behavior problems arise from conflicting attitudes which he has acquired toward the adults of the home and of the school. Needless to say, parents should avoid careless or confusing remarks about the child's teacher, and should do everything possible to support her legitimate status. There cannot be mutual understanding without a unity of goal and policy in the conduct of a school, whether it be a private or a public school.

The public school system in America has become an indispensable instrument for the perpetuation of our democracy. As early as 1935 the Educational Policies Commission (created by the National Education Association and the American Association of School Administrators) reached three fundamental conclusions:

- 1) The democratic way of life is being challenged at home and abroad.
- 2) The public schools are the foundation of democracy, and its first line of defense.
- 3) The most urgent and intensely practical problem facing the teaching profession is the achievement and maintenance of democracy through education.

Parent-teacher associations have accomplished an important pioneering work in bringing home and school into closer union. These associations still have a necessary service to perform. But they have depended

too much on group meetings, exhibit days, formal programs and mass appeal to reach the desired ends. The public school system in the post-war era will be under new pressures to bring the education of parents and of their children into more intimate interrelation. This will require personalized individual conferences between teacher and parent. The conferences should not be merely on an incidental or emergency basis. They can be made a systematic feature of the total educational program, by relaxing the excessive emphasis on constant pupil attendance. In rural, village and city schools alike it is possible to modify the regular yearly schedule sufficiently to make room for interviews and consultations.

Such individualized arrangements would tend to humanize school practice and counteract the tendencies toward regimentation which are so inconsistent with a democratic culture. Our schools need this type of "interruption." They are becoming too compartmented into homogeneous groupings, too stratified. There should be more mingling of young children and older children; more contacts between pre-parents of the secondary grades and the boys and girls in the primary grades, as well as more flexible interchanges between parents and teachers. The public school system has been called one of our most authoritarian institutions. If this is true, the condition can be corrected only by relaxing the rigidity of prevailing school administration, and by breaking down the barriers to freer human relationships.

These are the broad considerations which make the improvement of the parent-child-teacher relationship so vital to our culture. It is a three-way relationship. The child with his double bonds is an intermediate link, creating a third bond of responsibility between teachers and parents. The responsibility cannot become mutual without a common outlook upon the developmental welfare of the child. This requires more than academic achievement tests, intelligence scores and graded report cards. Home and school alike must lay less stress on competition and be more genuinely concerned with the nature and the needs of the child's personality.

The present volume undertakes to outline personality characteristics

in terms of developmental maturity and of environmental culture. The emphasis is not on academic progress, but upon the fundamental behavior equipment of the child,—his motor skills and demeanors, his emotional life, his concepts of right and wrong, his social adjustments, his sense of self, his sex attitudes, his plays and games, his spontaneous activities, his school interests and his orientation to the world of Nature and the expanding world of human society.

These are the true fundamentals of civilized life. And these fundamentals alone can draw teacher, parent and child into vital interaction. We hear much about indoctrination of the ideals of democracy. Indoctrination has an important role. But even more basic is the application of these ideals as a way of life in the everyday relationship of parent, teacher and child.

A SPECIAL WORD TO FATHERS

A new era is opening for fathers. The status of children is changing; and the role of father in the home is coordinately changing. Not long ago he was truly a monarch. His word was law, and the law was stern. He held himself apart from the plain everyday affairs of his children, reserving his powers for higher occasions of discipline and admonition. He did not unbend. Even during the long prenatal period he maintained a befitting detachment.

All this is now changing under the irrepressible tide of cultural forces. Fathers are actively sharing in the numerous everyday tasks that go with the rearing of children. Participation rather than detachment is the trend. The careful mutual planning which now characterizes pregnancy and maternity hygiene marks a new advance in our ways of living. With the aid of the famous Broadway success *Life with Father* we wave a gay goodbye to the paterfamilias of the good old days.

The modern father is now in the process of finding his new role. He has already discovered that he is not satisfied by emergency help with night feeding and laundry, nor by sketchy contacts with his children at evenings or on Saturday afternoon. He is somewhat amazed to find

that at times his child does not respond to his well meaning and affectionate approaches. He finds that at some ages the child seems to be better than at others. Perhaps he especially enjoyed the 3-year-old or the 5-year-old period, and was simply dumbfounded by the 6-year-old behavior. Some fathers do not get on a comfortable companionable basis until a son reaches nine or ten years of age, when they arrive at a man-to-man rapport.

Some ages are indeed smoother and pleasanter than others, but all are equally interesting and significant. The father-child relationship will not be on a fully enlightened level until both parents make a joint effort to understand the ever changing characteristics of the child at each advancing stage of maturity. This demands a developmental outlook upon all the problems of child care and child management. It demands an increasingly penetrating acquaintance with the *mechanisms of growth*.

We live in a technological age, and need not be frightened by the concept of mechanisms. Fathers in particular know something about the precision and beauty of engines and machines. They readily think in terms of atomic structures, electronic orbits, short and long waves and frequency modulation. They would like to know what makes the child tick. It degrades neither child nor father to bring mechanical concepts to bear upon the manifold wonders of the child's behavior and his individual development. These concepts do not solve the mystery of life; but they do strengthen our faith in the lawfulness of life and growth.

They help us to understand why the pathways of child development are so tortuous and yet so patterned and so ballasted by an overall trend toward optimal realization. This kind of insight leads to a deeper understanding of individual differences. It makes for philosophic tolerance, and a more vital appreciation of the meaning of infancy and childhood.

We respectfully invite fathers who may read this volume to regard it as an introductory manual in psychotechnology! A technology which deals with the mechanism of child development and thereby with the improvement of parent-child relationships.

PART TWO

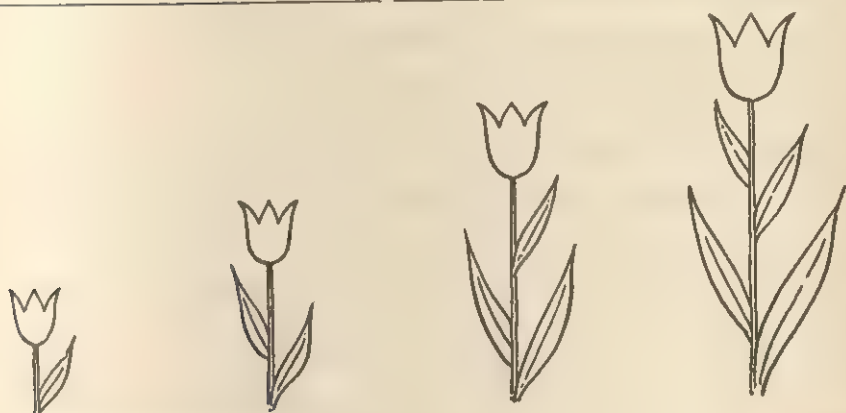


Growth of Man like growth of Nature
Gravitates within,
Atmosphere and sun confirm it
But it stirs alone.

—EMILY DICKINSON

4

THE FIRST FOUR YEARS



THE cycle of human development is continuous. All growth is based on previous growth. The growth process therefore is a paradoxical mixture of creation and of perpetuation. The child is always becoming something new; yet he always summates the essence of his past. His psychology at the age of five is the "outgrowth" of all that happened to him during the four years after birth,—and the forty weeks prior to birth. For all the past was prelude.

§1. THE NEWBORN INFANT

Birth marks the arrival but not the beginning of an individual. The true beginnings trace back to the embryonic and fetal periods when

THE FIRST FOUR YEARS

the tissues and organs of the body take form and when even the shape of the behavior to come is profoundly foreshadowed. Types of body build are prefigured: square and firm; round and soft; spindly and delicate. Modes of reaction characteristic of varieties of physique are likewise laid down.

The patterning of behavior gets under way remarkably early. By four weeks after conception the heart beats; by eight weeks, head and trunk make minimal movements; by twelve weeks, the hands flex; by twenty-four weeks the chest is capable of rhythmic movements; by twenty-eight to forty weeks all physiological functions may be sufficiently mature to insure survival in the event of birth.

Once the infant is born he must struggle for his very existence. With the assistance of Nature and caretakers, he must bring his various physiological functions such as respiration, temperature regulation, digestion, excretion, sleeping and waking into adequate coordination. While making these early life adjustments he appears unsteady, unstable. His thresholds of reaction are low and inconstant. He startles, sneezes, quivers, cries on slight provocation. His breathing and body temperature are irregular. He may even swallow in the wrong direction! Normally, he weathers the storms of adaptation and settles down to relative stability in a few weeks. But so exacting are these early transitions that we may say a baby is really not full-born until he is four weeks of age.

No sharp line can be drawn between "physiological" and "psychological" functions. A baby's satisfactions, needs, interests and drives are determined by the status of his entire organism, including his metabolism, the chemistry of his body fluids, and the tonus of his muscular system. Throughout infancy much of his behavior is directly related to the complex functions of feeding, sleeping and elimination. The acquisition of speech even involves a recombination of feeding and breathing behavior patterns,—a recombining which it took the race literally millions of years to perfect. The "lower" vegetative functions are thus incorporated into the growing action-system. They color

emotional patterns and temperamental trends. The autonomic nervous system which presides over these functions operates in close conjunction with the cerebro-spinal nervous system which governs sensation and motion. The new born baby is already in possession of the basic equipment for feeling, sensing and moving. His mental growth is well under way.

In the next four years he will make prodigious progress. Never again will he advance with the same speed. He is laying the wide base of a pyramid which continues to ascend in the years from five to ten. During the first half of this first decade he is preeminently a home child. During the second half he is both a home and a school child. In rapid succession he progresses from bassinet to crib, to high chair, to play pen; to porch, sidewalk, nursery and schoolroom; to first, second, third, fourth and fifth grades. In a growth sense it is a long, as well as a swift journey.

The present chapter will briefly characterize the developmental ground covered during the first four years with milestones at 4, 16, 28, and 40 weeks; 12, 15 and 18 months; and 2, 2½, 3 and 4 years.* The child does not linger at any of these milestones; so we shall emphasize the unremitting sweep which bears him on his forward course. But with the aid of ten stop-motion sketches we can get an impression of his transforming behavior make-up as he travels toward his consecutive destinations.

§2. 4 WEEKS OLD

The month old baby is no longer a mere neophyte in the elementary art of living. He breathes with regularity, his heart has steadied its pace, his body temperature has ceased to be erratic. His muscle tone is less fluctuant than it was in the days of long ago when he was only a newborn. He has reserves of muscle tonus. He taps the reserves and responds with motor tightening when you pick him up. This makes him feel less mollusious and more compact. By virtue of his heightened

* For a detailed account of these stages of development the reader may be referred to the companion volume: "Infant and Child in the Culture of Today" (Gesell and Ilg. Harpers, 1943).

muscle tonus he is already more competent to meet the buffetings of fate.

His reactions since birth have become more configured. He sleeps more definitely, wakes more decisively. He opens his eyes widely and does not lapse so much into shallow, ambiguous drowsing. When awake he usually lies with head averted to a preferred side. Often he extends the arm on that side, crooking the other arm at shoulder level in a sort of fencing attitude. He holds and activates this tonic-neck-reflex posture from time to time as though it were a developmental exercise, as indeed it is. Nature is laying a foundation for a coordination of eyes and hands.

In a few more weeks the baby will begin to look in the direction of the extended arm and catch sight of his hand. Even now he will see and briefly follow a moving object dangled near his eyes. But his hands remain fisted. He is not yet ready for reaching.

He gives attention only in so far as his behavior capacities permit. This will always be true of him even after he reaches school age. Just now he manifestly attends to the sensations of gastric well-being which suffuse him after a meal; and to the massive warmth of a bath. Sometimes he immobilizes with interest as he regards the face of his mother. His emotional patterns are very simple, if we may judge by the general impassiveness of his physiognomy. Nevertheless he reacts positively to comforts and satisfactions; negatively to pain and denials. He cries. He listens. Occasionally small throaty sounds emerge from his larynx.

In all these behavior tokens we see the germs of language, of sociality, perception, intelligence, body posture and even locomotion. The neuro-motor system is organizing apace. The mind is growing.

§3. 16 WEEKS OLD

By 16 weeks the neuro-motor system has so elaborated that the child is no longer always content to lie on his back. He likes to be held for brief periods in a seated position, so that he may face the world eyes

front. So held he can erect his head. This is the first component of the upright posture which in another year will enable him to walk alone. Command of head and eyes comes before command of feet.

The 16-week-old infant has gained considerable control over the six pairs of search-light muscles which move his eyes in their sockets. The eyes focus upon his own hand; they shift their focus to an object near by; they pursue a dangled toy moving through an arc of 180 degrees. Eyes are becoming nimble.

There is something prophetic in the way in which the 16-week-old infant relishes the sitting position. His eyes glisten; his pulse strengthens, his breathing quickens and he smiles as he is translated from horizontal to perpendicular. This is more than an athletic triumph. It is a widening of the visual horizon; it is a social reorientation.

Social behavior both personal and interpersonal has greatly expanded. He coos with personal contentment; he chuckles; he laughs aloud. He used to smile only on gastric occasions. Now he imitates a social smile. He also smiles responsively and vocalizes on social approach.

His hands are no longer predominantly fisted. They are uncurling; and soon they will be able to reach out. But at present the baby reaches with his eyes. He inspects, he looks expectantly; he even singles out small details in his visible environment. He associates sight and sound. He "notices" when he hears and sees his food prepared. He reacts to cues and clues. This always remains the essence of wisdom.

The 16-week-old child is usually well adjusted both to the world of things and to the world of persons. This is partly because he derives such great satisfaction from the free use of his eyes. He frets when his visual hunger goes unappeased. He quiets when ocular and social stimuli combine to feed his appetite for visual experience. But new demands are in the making. Soon he must satisfy the eagerness of his hands as well as that of his eyes.

§4. 28 WEEKS OLD

Touch hunger follows visual hunger. Or, rather, the two now combine; for the 28-week-old baby is bent on manipulating everything that he can lay his eyes and hands on. Whether he lies on his back or sits in his high chair he must have something to handle and to mouth. He likes to sit up, for he is gaining control of his trunk muscles,—another step toward the attainment of upright posture.

Note with what concentrated attention he exercises his growing powers. He sees a clothespin on his play tray. He grasps it in an instant, brings it to his lips and tongue for tactile impressions, bangs it on the tray for sound and motion, transfers it from hand to hand and back again for manipulatory experience, inspects it with a twist for visual perception. Such avid attention is born out of growth needs. The baby's play is work and his work is play.

So engrossing is his self-activity that he can amuse himself for long periods. But he can smile at onlookers and he is usually friendly both with familiars and strangers. Indeed he presents an amiable union of self-containedness and sociality. He alternates with ease between self-directed and socially referred activity. He listens to words spoken by others; he listens also to his own private vocalizations.

At this age the child's abilities are in good balance. His behavior patterns and trends are in focus. He is so harmoniously constituted, that he causes few perplexities on the part of his caretakers. It is a period of short lived developmental "equilibrium." There will be similar periods in his later growth career; but they likewise will be transient. The growth complex never fully stabilizes. New thrusts, new tensions of development produce imbalances which are in turn resolved and replaced by another temporary stage of comparative equilibrium.

The 28-week-old baby has numerous new problems of posture, locomotion, manipulation and personal-social behavior to meet before he reaches the age of 40 weeks. The course of true development can not always run smooth.

§5. 40 WEEKS OLD

Horizons widen with each advance in motor maturity. The 40-week-old infant can creep, and this greatly expands the scope of his initiative and of his experiences. But, significantly enough, he tends to keep head erect and eyes front while he creeps. He shows a special interest in vertical surfaces, by which he pulls himself to his feet; for the upright posture is his developmental goal. He is nearing this goal in gross motor control; he can sit quite alone and he can stand with support.

Fine motor control, also is advancing. Place a string on a table: he grasps it with prompt, precise pincer prehension. At 28 weeks he slapped the string with his flat palm. If he is more discriminating now it is because uncountable millions of delicate connections have silently organized in his network of neural and muscular fibrils. Nature is perfecting particularly the acuteness of his sensitive finger tips. He is under an irrepressible propensity to poke and pry and palpate with his extended index finger.

This is another method for widening the psychological horizon. By his inquisitive poking he probes into the third dimension of depth. He discovers the physical secret of container and contained. Place a cube in a cup: he thrusts his hand in and fingers the cube. His perceptual world is not as flat as it used to be.

He is also penetrating more deeply into his social environment. He discriminates more sharply between familiars and strangers. He imitates gestures, facial expressions and sounds. He heeds "No! No!" He echoes "Da, Da." He probably has learned a nursery trick. But if he now pat-a-cakes to everyone's delight, it is due not so much to the teaching of his elders, as to his own developmental readiness. At 28 weeks it was quite impossible to teach him this nursery game.

§6. 12 MONTHS OLD

Since the baby was born the earth has completed one full revolution around the sun,—chronological age: one year. The baby can now place

a cube into a cup and release it,—developmental age value: one year. A baby is as old as his behavior. From the standpoint of guidance and education he must be appraised in terms of the maturity level of his abilities. When a year old he can usually cruise around his pen by himself, but in walking he needs the guiding help of a supporting hand.

Gross motor skills show more individual variation than fine motor and adaptive behavior. Again place a string on a table. He plucks it with deft thumb and forefinger opposition and he dangles the object tied at the end of the string. He thus gives evidence of increasing perceptiveness of relations. He puts one and one together. He holds one cube and contacts another cube with it; or he puts a cube into a box; or into the receiving palm of his mother's hand.

Left to his own devices with a dozen cubes, he exhibits a very instructive behavior pattern. He picks up one cube and drops it; he picks up another cube and drops it; he picks up still another and drops it. All this is done in a somewhat disorderly manner; but by all the canons of development this one-by-one cube manipulation must be set down as the first step in the gradient of mathematics! It is nothing less than rudimentary counting. This remarkable behavior pattern is not the result of imitation nor of cultural impress; although the culture in due season will supply the appropriate labels, 1, 2, 3, 4, 5. . . . In time the labels will be true symbols and the child will entertain corresponding concepts,—but not yet!

In social situations, too, the yearling child puts one and one together. He likes an audience; he repeats performances laughed at; he enjoys all sorts of to-and-fro household play. This social reciprocity is based on his increasing emotional perceptiveness which enables him to read more accurately the emotions of others.

§7. 15 MONTHS OLD

At 15 months the behavior picture seems to lose its harmony and equilibrium. This is the dart and dash and fling age. The give-and-take

of to-and-fro rapport is superseded by one-way behavior. The 15-month-old child is no longer a mere creeping and cruising baby. He strains at the leash with his new found powers of walking and toddling. He likes to overturn waste baskets; he likes to pull off his shoes.

His gross motor drive is powerful: he is ceaselessly active with brief bursts of locomotion, starting, stopping, starting again, climbing and clambering. It is as though he were an aggressive jeep putting himself through all its paces.

If he is confined to a pen, he is likely to pick up each toy and fling it outside. This is a gross type of prehensory release,—a casting pattern which needs practice,—at least in his own estimation. Developmentally, crude casting precedes more highly coordinated forms of throwing. But this casting is not altogether crude; because the baby is casting with his eyes as well as with his hands. He is using his eyes alertly to see where an object falls, as it falls. This is a significant exercise in distance perception, in ocular accommodation and convergence. It requires agile co-ordination of his various eye muscles.

The 15-month-old child is not all bluster and bumble. Surprisingly enough he can poise one cube over another and release it with sufficient neatness to build a tower of two. In the ancient history of the race this was an important construction feat. It is a significant achievement in the history of the individual.

The release pattern is now so refined that the baby can pluck a pellet and drop it into the mouth of a small bottle. He does this without instruction or demonstration. We simply place the pellet beside the bottle. He responds with immediate spontaneity. Spontaneous behavior is often a key to developmental readiness.

§8. 18 MONTHS OLD

The 15-month-old toddler strains at the leash. The 18-month run-about is on the loose, colliding with new physical and cultural problems at every turn. The one-year-old, by reason of his locomotor imma-

turity and relative docility, is protected from excessive impacts of the culture. But the 18-month-old child is no longer a "mere" baby, and life is not so easy for him. Larynx, legs, hands, feet, bladder and bowel sphincters are all, concurrently, coming under cortical control. With such an extraordinary diversity of behavior patterns to coordinate, it is no wonder that he functions in brief spans and pulsations of attention.

His attention is sketchy, mobile, works in swift brief strokes. He lugs, tugs, dumps, pushes, drags, pounds, runs into nooks and corners and byways; goes up and down stairs; by one device or another, pulls a wheeled toy from place to place, abandons it,—and then resumes with variations, including walking backward.

He attends to the *here and now*. He has little perception for far off objects. He runs into them headlong, with scant sense of direction. He has little perception for far off events. No need to talk to him about the future. He may, however, understand and even execute a simple commission within his motor experience, such as Go-and-get-your-hat. He has a few favorite expressions of his own: "all gone," "bye-bye," "oh-my!"

Although he has meager pre-perceptions he has a significant sense of "conclusions." He likes to complete a situation. He puts a ball in a box with decision and caps the performance with a delighted exclamatory "Oh-My!" He closes a door; he hands you a dish when he has finished;—he mops up a puddle,—all with an air of conclusiveness, as if to say *now-that's-done*.

This is a most interesting growth phenomenon. It accounts for his punctuated demeanor. It reveals the operation of morphogenetic processes even in apparently trivial behavior. We are too blind to the significance of similar subtleties in the behavior patterning of the child of school age.

§9. 2 YEARS OLD

The 2-year-old is graduating from infancy. Since the age of 18 months he has gained two inches in height, three pounds in weight and four

teeth in dentition. He can run without falling; he can turn the pages of a book singly; he can pull on a garment; he can keep a spoon right side up as he puts it into his mouth; he can frame a two word phrase or a three word sentence; he can even use words to express and to control his toilet needs. By all these tokens he is sometimes too readily considered to be ripe for promotion from home to nursery school.

More concessions ought to be made to his developmental immaturity. He is still an infant-child. There is a residual stagger in his walk. His running is amateurishly headlong. He can not slow down or turn sharp corners. (Motor abilities are rarely modulated while they are still new.) He delights in the grosser forms of muscular activity,—romping and rough and tumble play. He tends to express his emotions massively in dancing, clapping, stamping or captious laughter.

The facial muscles of expression, however, are more mobile. The muscles of the jaw are under better control. Chewing is no longer as effortful as it was at 18 months, and mastication is becoming rotary.

The fine motor coordination of the 2-year-old is obviously delimited by certain selective immaturities of his nervous system. He can build a tower of five or six cubes; but he cannot rearrange them in a horizontal row to build a wall. He also has difficulty in making a horizontal stroke with crayon, even though he imitates a vertical stroke with the greatest of ease. This predilection for vertical over horizontal is based not on chance but on a foreordained geometry of growth. When somewhat older, he will show a comparable predilection for the horizontal. Yet older, he will be in full command of both dimensions. At the age of three he builds a bridge which combines both vertical and horizontal components.

Similar developmental delimitations show themselves in the sphere of personal-social behavior. He has a robust sense of *mine*, but a very weak sense of *thine*. He can hoard, but he can not share. Nevertheless, let us not lose hope, for he can smile at praise, and he can hang his head in disgrace!

§ 10. 2½ YEARS OLD

The 2½-year-old child also has difficulties with *thine* and *mine*,—difficulties which, by the way, have not been entirely mastered even by the adults of the human race. The 2½-year-old, however, has developed a stronger awareness of persons other than himself. He will bring a favorite toy to nursery school to display it with pride; but he finds he can not quite surrender it to his playmates. He will also be seized with an intense impulse to acquire a coveted toy; but once in possession he abandons it with indifference. The sense of ownership is evidently in a transitional, unmodulated phase of development.

The 2½-year-old does not have himself well in hand. He is reputed to be variously impetuous, imperious, contrary, hesitant, dawdling, defiant, ritualistic, unreasonable and incomprehensible. He does lack the equanimities of the classic self-containment of 28-week-old maturity.

His difficulties are due to the fact that he is just discovering a new realm of opposites. Life is no longer a one-way street as it was at 18 months. Life is charged with double alternatives. Every pathway in the culture has become a two way street. He has a great deal of intermediating to do between contrary impulses, and yet, he has to become acquainted with *both* opposites. Being inexperienced as well as immature he often makes two choices where he should make one; or he makes the wrong choice; or he makes none at all. Hence his reputation! Hence the impatience of his disciplinarians.

For the time being his action-system is in a stage of relatively unstable equilibrium. He has yet to acquire skill in balancing alternatives and in thinking of one alternative to the exclusion of another. He reminds us of the two-way rocking and the creep-crawl stages in the patterning of prone locomotion. Yet we know that he is forging ahead developmentally and we can predict that at the age of three years he will have himself in hand.

§ 11. 3 YEARS OLD

The 3-year-old has himself in hand because he has come out victorious in his struggle with diametric opposites. He is no longer as paradoxical and unpredictable as he was at two-and-a-half years. He has captured the power of judging and choosing between two rival alternatives. In fact, he likes to make a choice, within the realm of his experience. He is sure of himself. He is emotionally less turned in on himself. He takes his routines more sensibly and does not insist on rituals to protect himself. He has more flexible personal relations. Self-dependence and sociality are well balanced. Accordingly, he seems to fit into the culture more comfortably. His whole action-system, for the time, is in good working equilibrium. Hence his good reputation. Hence the approval of his elders.

THREE is a nodal age, a kind of coming of age. The conflict of opposites which a half year ago expressed itself in "negativism," "wilfulness," and "contrariness" gives way to a new realization of social demands. Far from being contrary he tries to meet and to understand these demands. He even asks, "Do it dis way?"

Much of this social amenability is based on sheer psycho-motor maturity. He is more sure and nimble on his feet; he no longer walks with arms outstretched (he swings them like a man); he can dodge, throw, stop-go and turn sharp corners. He has attained to the developmental rule of three: he can count to three; he can compare two objects, which requires a three step logic; he can combine three cubes to build a bridge; he can combine a vertical and horizontal crayon stroke to make a cross; he can barter commodity *a* for commodity *b*, which also requires a three step logic; in play and games he can wait his turn.

For all these reasons you can bargain with and on the 3-year-old! He marks both a culmination and a prophecy in the cycle of child development.

§12. 4 YEARS OLD

The 3-year-old is conforming. The 4-year-old is assertive and expansive. He bursts with motor activity: racing, hopping, jumping, skipping, climbing. He bubbles with mental activity, manifested in an abandoned use of words and in flights of fable and fancy. The 4-year-old tends to go out of bounds, notably in his speech and in his imaginative antics. He is blithe and lively, but he is more firmly based than may appear on the surface. Emotionally and intellectually he comes back to home base; he does not get too detached from his moorings. The mental consolidations achieved at the age of three serve to stabilize.

The key to the psychology of the 4-year old is his high drive associated with a mental organization which is mobile at the margins. His mental imagery is almost mercurial. It moves from one configuration to another with great agility. In his dramatic play he doffs and dons his roles with the greatest of ease. In his drawing he is often a downright improviser. He designates his drawings during and after execution rather than in advance. His drawing of a man is scarcely recognizable as such, and readily metamorphoses into something else with free comments.

The 4-year-old is voluble because the architected neuron network which underlies language, is literally burgeoning with "outshoots" which take the form of new conjunctions, new adverbs and adjectives, expletives and novel syntax: *maybe; I guess; not even; enormous; suppose that; really; and I bet you can't do this, I hope!* Order finally emerges out of this linguistic luxuriance; but at four years we must expect some developmental *mal a propos*. Even though he can scarcely count to four, the 4-year-old blithely talks of seventy-seven.

This is a growthsome stage. He tells tall tales; he brags; he rattles; he threatens; he alibies; he calls names. But this bravado is not to be taken too seriously; his attractive traits more than compensate. He is fundamentally striving through these impulsions to identify himself with his culture and to penetrate its unknown. Sometimes he seems to be almost

conscious of the growing up process. He is much interested in becoming five years old; he talks about it a lot.

*

*

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We have now characterized in rapid sequence eleven ascending levels of maturity in the first four years of life. In succeeding chapters we shall describe at length six more maturity levels embracing the years from five to ten. At these later ages we shall encounter many new and interesting patterns of behavior, but we do not expect to find new mechanisms of development. The fundamental mechanisms have already revealed themselves in the transparent naivetes of infancy and pre-school childhood.

A panoramic view of the eleven early stages of maturity gives us a deepened appreciation of the surety and the lawfulness of child development. Although there are innumerable contingencies in the environment, we see that the growth complex moves forward with certainty toward specific ends. Every child is unique; but every child is also a member of one human species. Obedient to these species characteristics there are growth sequences which are rarely or never circumvented. The motor control of the eyes precedes that of the fingers; head balance precedes body balance; palmar prehension precedes digital prehension; voluntary grasp precedes voluntary release. Banging comes before poking; vertical and horizontal hand movements before circular and oblique; crawling before creeping; creeping before upright walking; gestures before words; jargon before speech; nouns before prepositions; solitary play before social; perceptions before abstractions; practical before conceptual judgments. These are but a few simple examples of the sequential order inherent in the structuralization of child behavior, from its lowest to its highest manifestations.

The structuralization of behavior,—this is an important concept. It means that we must visualize the action-system of the child as a living structure, which is ingeniously fabricated through the architecture of

growth. The lines of this construction are suggested by the behavior profiles which we have sketched.

From these sketches it is evident that the mind does not grow like an onion, nor like an artichoke by the addition of successive layers. It grows by weaving unimaginably complex patterns which correspond to the multiplicities of a world of things and a world of persons. All these patterns are incorporated into a single individuality.

The process of this *incorporation* is intriguing to everyone who wishes to understand the dynamics of psychological growth. The action system (the *corpus* of behavior) develops as a unitary whole. In general its organization proceeds in a head to foot direction; and from the central axis outward. The trunk is innervated before the shoulders; the shoulders before the arms; the arms before the hands. Opposed members and counterpoised functions must be brought into balance: flexor versus extensor muscles; right and left extremities; eyes and hands; forward and backward movements; vertical and horizontal movements; grasp and release; mine and thine; self-activity and sociality; good and bad, etc.

As it matures the action-system reconciles and counterbalances a host of opposites. But this process is so intricate that growth cannot take a straight line course. It seesaws, emphasizing now one and now another opposed function, but finally coordinating and modulating both. Self-regulatory fluctuation and reciprocal interweaving are outstanding methods of child development.

As we have seen from the eleven maturity profiles in this chapter, the growing action-system is in a state of formative instability combined with a progressive movement toward stability. Growth gains are consolidated in periods of relative stability. There is a somewhat rhythmic trend toward recurrent equilibrium. Witness the relatively stable equilibrium at 16 weeks, 28 weeks, and 3 years. Contrast the relatively unstable equilibrium at 2½ years.

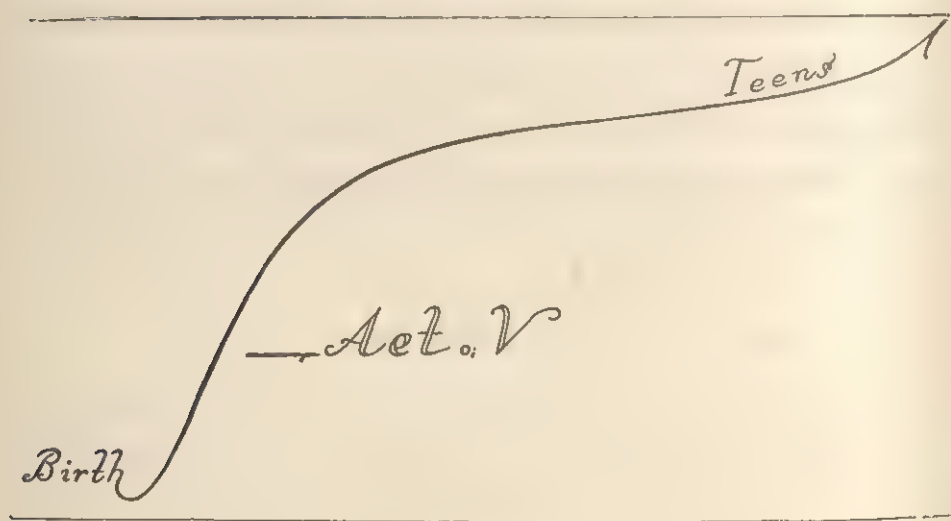
The trends of development tend to repeat themselves at ascending levels of organization; as though the cycle of development took a spiral

course. It is an onward spiral, but the child at a given stage may show a strong resemblance to what he was at an earlier stage.

These parallels in the developmental spiral are very instructive. They indicate the logic of growth changes. Although the child always remains true to himself, we must expect him to pass through varying phases. It helps us to understand his behavior if we recognize that there are nodal periods when he is in focus, and other periods when he is in transition. Although we shall never apply age norms arbitrarily, it gives us a sense of perspective to know that there are fundamental correspondences in the dynamic makeup of the child at 16 and 28 weeks; at 3 years and 5 years; at 2½ years and 6 years. The maturity characteristics of the infant and pre-school child may well serve as touchstones for a more sympathetic insight into the inner psychology of children of school age.

5

FIVE YEARS OLD



How can we best portray the rich and varied developmental transformations which take place in the growthsome years from five to ten? Most of these transformations come so stealthily that we are scarcely aware of them at the time at which they occur. Yet they come with such unremitting surety that each birthday marks a significant advance. Each year brings changes in the maturity picture.

AGES AND STAGES

In the chapters which follow we shall attempt to outline the patterns of these progressive changes. What the first four years have wrought has

just been summarized. Our next task is to characterize the succeeding years in terms of their *developmental essence*. This means a series of delineations which will define the directions and the destinations of development. If in these delineations we make incidental comparisons between adjoining stages of maturity we should get a further insight into development as a process.

The concept of maturity, when applied to children is, of course, relative. A 3-year-old child is normally more mature than a 2-year-old. A 1-year-old baby is extremely mature when compared with a 16-week-old baby. Indeed, the maturity difference between them is very much greater than that between a 6- and 7-year-old child; for the rate of development has already slowed down by the age of five years.

The developmental changes which occur in the years from five to ten, therefore, are not as striking as those which occur in infancy. Being less dramatic, the changes are easily overlooked, both at home and at school. To become more aware of the developmental forces which bring about these changes, we need a frame of reference. Above all we need to know that the forces are working day in and day out, year in and year out. Growth is a process.

Our task is to point out the influence of age on the growth of behavior. The psychology of a child is determined by his maturity and by his experience. The experiences in turn are determined by his maturity as well as by the culture in which he lives. The variations both in child and culture are, of course, enormous. A child may be reared in Patagonia or on Park Avenue. That must make some difference. His color may be white, black or brown. In terms of endowment he may be idiot or genius. In physique he may be endo-, meso-, or ecto-morphic. In temperament, viscer-, somato-, or cerebro-tonic. In life career he may have enjoyed the affection and security of a happy home; or he may be one of those culturally disinherited "five-year-old people" of war-ridden Europe "who look like seventy because they have seen things no child should see."

With such a multiplicity of variables it would be fatuous to look for

mathematical averages. It is possible, however, by comparing one age group with another to single out distinguishing behavior characteristics and developmental trends. On the basis of such systematic comparisons, we shall draw up a series of *behavior profiles*, devoting a separate chapter to each age level.

The profiles will present behavior characteristics which are typical of intelligent children of favorable socio-economic status in our American culture. A profile does not attempt to portray either an individual child or a statistical child. Each profile is a composite character sketch, which incorporates intimate cross sectional and longitudinal studies of a wide range of children. As such the behavior profiles may be used to identify and to interpret the changing developmental status of actual children as they mature in the years from five to ten. Our first profile outlines the developmental essence of the 5-year-old. Five is a nodal age which marks both the end and the beginning of a growth epoch. Five, himself, seems to be conscious of a culmination, for he announces somewhat assertively, "I am five!"

BEHAVIOR PROFILE

The 5-year-old has come a long distance on the upward winding pathway of development. He will have to travel fifteen years more before he becomes an adult, but he has scaled the steepest ascent and has reached a sloping plateau. Although he is by no means a finished product, he already gives token of the man (or the woman!) he (or she) is to be. His capacities, talents, temperamental qualities, and his distinctive modes of meeting the demands of development,—have all declared themselves to a significant degree. He is already stamped with individuality.

But he also embodies in his young person general traits and trends of behavior which are characteristic of a stage of development and of the culture to which he belongs. *These underlying pervasive traits constitute his 5-year-oldness.* They are the maturity traits which make him somewhat different from the 4-year-old and from the 6-year-old.

Five is a nodal age; and also a kind of golden age for both parent and child. For a brief period the tides of development flow smoothly. The child is content to organize the experiences which he gathered somewhat piecemeal in the less deliberate fourth year. As an expansive 4-year-old he was constantly going out to meet the environment, making his thrusts in an almost harum-scarum manner. In contrast, the 5-year-old is self-contained, on friendly and familiar terms with his environment. He has learned much; he has matured. He takes time to consolidate his gains before he makes deeper incursions into the unknown. At the age of about $5\frac{1}{2}$ years a new form of developmental restlessness makes itself apparent.

Meanwhile there is an interlude when he feels quite at home in his world. And what is his world? *It is a here-and-now world*: his father and mother, especially his mother; his seat at the dining room table; his clothes, particularly that cap of which he is very proud; his tricycle; the backyard, the kitchen, his bed, the drugstore and the grocery store around the corner (or the barn and the granary if he is fortunate enough to live in the country); the street, and perhaps the big kindergarten room, with other children and with another "nice lady." But if his universe has a center, it is his mother who is that center.

He does not tolerate even a kindergarten well, if it makes too many pioneering demands upon him. Just now he is not in a pioneering phase of development. He has a healthy intolerance for too much magic and too much fairy tale. He has just barely discovered his actual world; and this has enough novelty and reality on its own merits. He is even something of a homebody. This is not because of abnormal dependence; but because the home is a complex institution, which invites and rewards his consideration. He is happy to play house, with all its domesticities, by the hour, which is not to his developmental discredit. And if while he is in kindergarten he particularly enjoys the dramatization of domestic situations, we cannot be amazed. He must make the familiar more familiar to himself; the familiar world is still new.

Even his infancy is relatively recent in time. He likes to have the experiences of his earlier childhood revived for him by his mother. He

talks baby talk to his infant sister. All this helps him to detach himself from his babyhood and to become more completely identified with his present immediate environment.

His rapport with the environment is very personal. He is not yet ripe for the conceptual detachments and the abstract notions which adult ethics aspires to. He has a fairly robust sense of possession; for things that he likes he even has a pride of possession; but it is with reference to his *own*. He does not have a general notion of ownership. He tends to be realistic, concrete and first-personal; without, however, being aggressive and combative. "Do dogs run?" a 5-year-old was asked. "I don't have a dog!" was his polite answer.

Yet within the limits of the familiar and a narrow fringe of the unknown, he will ask questions of his own. What is it for? What is it made of? How does this work? Why does the bus come around this way? are favorites.

The 5-year-old makes a favorable impression of competence and stability, because he does not go off on wild tangents. Nor is he over-demanding. He likes to function well within the realm of his abilities. Although his spontaneous play is not stereotyped it tends to restrict itself to small, conservative variations. But these variations are numerous and in time they yield substantial developmental gains.

Self-limitation is almost stronger than self-assertion. Accordingly he demands adult help where needed. He likes little responsibilities and privileges to which he can do full justice. He is best managed on that basis rather than through challenges to efforts still beyond him. He may respond with little flashes of resistance or sensitiveness if overtaxed; but quickly resumes his habitual poise. There is often a vein of seriousness. He is much more deliberate than a 4-year-old. He thinks before he speaks.

Nevertheless, the 5-year-old may have a vein of humor. He likes to plan a "surprise-joke," even in the realm of moral conduct. His father asks him, "Have you eaten your dinner?" He says "No!", already betraying advance amusement in his deception. He adds, "No I won't!" And

presently on investigation, to everyone's great joy, it proves that he has already eaten the dinner, every bit of it!

Five-year-olds like to fit into the culture in which they live. Their spontaneous activity tends to be under good self-control. They seek adult support and guidance. They accept adult help in making unfamiliar transitions. They are eager to know how to do things which lie within their capacity. They like to be instructed, not so much to please their elders, as to feel the satisfactions of achievement and social acceptance. They like to practice the social convention of asking for permission and of waiting for formal permission. Five is an age of conformity which sums itself up in the question, "How do you do it?"

This docility, however, does not mean that the 5-year-old, with all his attractive traits, is a highly socialized individual. He is too deeply immersed in his world to have a discriminating perception of his self among his peers and superiors. His cooperative play is usually limited to a group of three; and is conducted with chief concern for his individual ends rather than the collective ends. Boys and girls accept each other freely regardless of sex; though not without hierarchical competition as to who in housekeeping play should fill the role of mother and who that of the baby. Not being unduly aggressive and acquisitive, the 5-year-old tends to get along peacefully with playmates in simple group play.

The emotional linkage with his mother is strong. He obeys her readily. He likes to help about the house. He enjoys being read to by his mother. Should things go wrong, he may use her as a scapegoat, blaming her as a "mean mommie." On the other hand he will also accept punishment from her with a temporary change of course.

These emotional patterns are, of course, subject to great individual variations; but they suggest a strong matriarchal orientation. The mother, after all, is a rather important figure in the small world of the 5-year-old. She is obviously the Great Executive Agent of the household from whom proceed all blessings and authorizations. He is discovering the outlines of the social order,—outlines which emerge in the home.

And he signalizes his new sociological insight by asking his mother to marry him!

This proposal reflects the intellectual limitations as well as the emotional patterns of a typical 5-year-old. He represents an interesting combination of practical realism and primitive naivete. He has some appreciation of yesterday and tomorrow, but he understands *me—now—here* better than *you—then—there*. He is so completely immersed in the cosmos that he is unaware of his own thinking as being a subjective process separate from the objective world. He is factual and literal rather than imaginative. He can distinguish his left from his right hand in his own person, but he lacks that extra bit of projectiveness which would enable him to distinguish left from right in another person. Although he is beginning to use words with great facility he is so self-in-cosmos engrossed that he cannot well suppress his own point of view to realize by reciprocity the point of view of others. Yet he has an elementary sense of shame and disgrace. He seeks affection and applause. He likes to be told how nicely he is doing. He likes to bring home something he has made at school.

The 5-year-old is a pragmatist rather than a romanticist. He defines in terms of use: "A horse is to ride. A fork is to eat." Fairy tales with excessive unrealities vex and confuse him. He is serious, empirical, direct. Give him a crayon and he will draw a man for you with head, torso, extremities, eyes and nose. He may even supply five digits, for he can count to four or five. He can also copy a square. If he copies a few capital letters he is likely to identify them very closely with persons and objects. He almost makes personalities for certain words. His mechanics and his astronomy are likewise tinged with animisms. He is very innocent in the realm of causal and logical relationships. Clouds move because God pushes them, and when God blows it is windy.

Nevertheless, FIVE is a great talker. The volubility of the fourth year yielded an increased vocabulary of perhaps 2,000 words. He has overcome most of his infantile articulation. He uses connectives more freely when he narrates an experience. He can tell a tale. He may exaggerate;

but he is not given to over-fanciful invention. His dramatic play is full of practical dialogue and a kind of collective monologue. He is using words to clarify the multitudinous world in which he lives. In language perhaps, more than in any other field of behavior he shows a slight tendency to ramble out of bounds. This is a wholesome growth tendency, for words will help to detach him constructively from his mother and from the environment which holds him in its grasp.

In general the emotional life of the 5-year-old suggests good adjustment within himself and confidence in others. He is not without anxieties and fears, but usually they are temporary and concrete. Thunder and sirens awaken dread. Darkness and solitude cause timidity. Many a 5-year-old has fits of fearfulness lest his mother should leave him, or be gone when he awakens. His dreams may be pleasant, but he is often more subject to nightmares in which terrifying animals figure more prominently than persons.

All things considered, however, the 5-year-old in his waking hours is in excellent equilibrium. Somatically his health is good. Psychologically he is comfortably at home in his world, because he is at home with himself. He may be pushed off balance but he tends to return to counterpoise. Ordinarily he does not go off on tantrum tangents. A brief stamping of feet and a "No I won't" suffice. Although fond of climbing and gross motor activity, he shows composure in his standing and sitting postures. He does not shift or fidget while in a chair. He stands aplomb. Oftentimes we see unconscious grace and skill both in gross and fine motor coordinations. There is a finished perfection and economy of movement,—which again suggests that five is a nodal stage toward which the strands of development converge to be organized for a new advance.

Indeed the psychological nature of five-year-oldness becomes most apparent when we halt at this nodal milepost and look back at the developmental path by which the child reached his present estate. It is a winding, spiraling pathway. There were similar mileposts in the past: there will be others in the future. Five-year-oldness compares with

3-year-oldness and with 28-week-oldness in its general configuration and quality. Ten-year-oldness will resemble five. These are brief periods in which the assimilative, organizing forces of growth are in ascendancy. During intervening periods, at four, six and eight years the expansive, fermentive, forward thrusts of development are more prominent.

Needless to say these alternations in the accents of development are not sharply defined. The growth continuum is like the chromatic spectrum: each phase, each color, shades by imperceptible gradations into the next. Yet the seven colors of the rainbow are distinguishable. In a similar way the maturity traits of the 5-year-old are distinguishable from those of the 6-year-old.

And, gentle reader,—be forewarned, you will not understand your 6-year-old unless you make the distinction!

MATURITY TRAITS

A behavior profile aims to give us a composite picture of the child as a whole. We cannot do justice to his psychology unless we think of him as a total unit, as an individual. If we try to take him apart he vanishes; he ceases to be a person.

Nevertheless he is so many-sided that we cannot attend to every aspect of his complex behavior equipment at one glance. We must look at him from different angles, and seek out those characteristics which are of special significance. Since he is a unified personality we shall find that all his traits are more or less interdependent.

For practical purposes, however, we can group these traits into ten classifications which are shown on the accompanying table. We call them *maturity traits* because the emphasis, throughout, is not on the abilities of the child but upon the stages and mechanisms of his development.

The list of traits is fairly comprehensive and covers the most important areas of behavior with which home and school are concerned. Under the various headings we shall cite concrete examples of behaviors

CLASSIFICATION OF
MATURITY TRAITS AND
GRADIENTS OF GROWTH

§ 1. Motor Characteristics

Bodily Activity
Eyes and Hands

§ 2. Personal Hygiene

Eating
Sleep
Elimination
Bath and Dressing
Health and Somatic
Complaints
Tensional Outlets

§ 3. Emotional Expression

Affective Attitudes
Crying and Related
Behaviors
Assertion and Anger

§ 4. Fears and Dreams

Fears
Dreams

§ 5. Self and Sex

Self
Sex

§ 6. Interpersonal Relations

Mother-child
Father-child
Siblings
Family
Manners
Teacher-child
Child-child
Groupings in Play

§ 7. Play and Pastimes

General Interests
Reading
Music, Radio and Cinema

§ 8. School Life

Adjustment to School
Classroom Demeanor
Reading
Writing
Arithmetic

§ 9. Ethical Sense

Blaming and Alibiing
Response to Direction, Pun-
ishment and Praise
Responsiveness to Reason
Sense of Good and Bad
Truth and Property

§ 10. Philosophic Outlook

Time
Space
Language and Thought
War
Death
Deity

*The foregoing areas of behavior
in ten major sectors of
child development are treated
by ages in Chapters 5 to 10 and
by gradients in Chapters 11 to 20.*

which we have encountered at the yearly age levels. The examples are not always typical, but they do illustrate the kinds of behavior and the degrees of maturity which parents and teachers have to reckon with in relatively normal children.

The maturity traits are set forth in brief, informal statements which reflect the everyday happenings of home and school life. We do not set up these traits as norms, but rather as indicators of the child's behavior equipment at a given level of maturity.

Sometimes this behavior is undesirable and preventable. If the reader understands the developmental import of the behavior he can usually work out a method of management suitable to the child's maturity. Child guidance must always be adjusted to the demands of development. Occasionally specific guidance measures are suggested. Generally the guidance will be implied in the statement of the traits and will not call for detailed formulation. For convenience, a standard set of ten rubrics will be used in presenting the illustrative maturity traits at each age.

We begin with *Motor Skills*. Basically the child is a system of muscles with which he executes motions in time and space. We are interested in the course, the form, the symmetry, and the direction of these motions. How do his motor coordinations change with age, as revealed in body posture, in handedness, in drawing, and in the use of eyes and hands?

The child is also a physiological organism which must replenish and sustain itself, which is subject to illness and outward stresses, and inward tensions. Under the rubric *Personal Hygiene* we subsume the behaviors and adjustments which relate to eating, sleeping, elimination and physical well-being.

Affective attitudes and threats to the organism are manifested in various forms of *Expressional Behavior*, and in *Fears and Dreams*.

The forces of self-conservation, however, are strong. The child builds up a sense of self, he differentiates himself from the opposite sex, he comes into increasing command of sex factors which concern his own

life and his relations with others. Significant growth changes occur in the field of *Self and Sex*.

He actually works out the detailed architecture of his sense of self through social rather than private activities—through a vast web of associations with his elders, his parents, his teachers, and compeers,—the web of *Interpersonal Relations*.

Much of his activity, both personal and social, is playful, experimental, gamesome, recreational. His *Play and Pastimes* reveal his spontaneous energies and interests.

But modern culture has willed that the child from five to ten must also go to school. He has much to learn about the sciences, the arts and the amenities of civilization. The patterns of his *School Life* reveal how he reacts to the demands of the culture.

In school hours and out of school hours, he is constantly thrust into the necessity of adjusting to other persons, friends and strangers, young and old, threatening and kind. Thereby he weaves a web of personal-social relationships which express themselves in various labels and values: "thine and mine," "good and bad," "do and don't," "right and wrong," "you-are-to-blame," "I-am-to-blame," "be-a-good-boy," "be-a-nice-girl." Here is the developmental matrix of the *Ethical Sense*.

Two intermeshed worlds surround the child: the world of things and the world of persons. The environment would become overpowering and overbewildering, did not the child have an insuperable propensity to establish his own orientations. They are orientations of intellect and of attitude. They encompass the major mysteries of life and death, of nature, of mankind, and of the supernatural forces. Philosophy has been defined as the knowledge of things divine and human and the causes in which they are contained. Even a child makes his own formulations in this vast field of knowledge. His formulations undergo interesting transformations with age. We shall describe these transformations in terms of the child's *Philosophic Outlook*.

The following maturity traits are not to be regarded as rigid norms nor as models. They simply illustrate the kinds of behavior—desirable or otherwise—which tend to occur at this age. Every child has an individual pattern of growth, unique to him. The behavior traits here outlined may be used to interpret his individuality and to consider the maturity level at which he is functioning.

§ 1. MOTOR CHARACTERISTICS

Bodily Activity

FIVE is poised and controlled. He is well oriented to himself. Posturally he is less extreme and less extensor than he was at four. He is closely knit. His arms are held near his body. His stance is narrow. In kicking a ball he may throw and kick simultaneously. Eyes and head move almost simultaneously as he directs his regard to something. He is direct in his approach, facing things squarely. He goes directly to a chair and seats himself. He appears to be well oriented to the four points of the compass as he turns a quarter to left or to right or even to the back as he is seated in a chair.

Gross motor activity is well developed at five. Although he may tread with feet pronate, he can walk a straight line, descend stairs alternating his feet and skip alternately.

His alternating mechanism is put to practice in much of his behavior. He loves his tricycle and is adept at riding it. He climbs with sureness and from one object to another. He shows a marked interest in stilts and roller skates although he cannot sustain a performance for long.

FIVE's economy of movement is in contrast to FOUR's expansiveness. He appears more restrained and less active because he maintains one position for

longer periods, but he changes from sitting to standing to squatting in a serial manner. He is none-the-less active. Although he plays longer in one restricted place, he is a great helper who likes to go up stairs to get something for mother, or to go back and forth from kitchen to dining room to put things on the table.

Eyes and Hands

FIVE sits with trunk quite upright, his work directly before him. He may move to right or left slightly to orient his body, and he may stand and continue. His eye-hand performance appears as capable as an adult's, although actually the finer patterns have yet to develop. His approach, grasp, and release are direct, precise and accurate in simple motor performances. He utilizes his pre-school toys more skillfully and purposefully. A familiar puzzle is done in a mercurial manner.

He is becoming more adept with his hands and likes to lace his shoes, fasten buttons that he can see, "sew" wool through holes on a card by turning it over. He likes to place his fingers on the piano keys and strike a chord. He now shows a preference for small as well as large blocks of various sizes and colors with which he builds simple structures. He also likes to copy from a model.

FIVE likes to observe too. He watches mother make something, then he tries it. He needs many models and likes to copy designs, letters and numbers. He also likes to have outline pictures to color, trying to keep within the lines. FIVE should be well provided with this type of material so that he may be better able to put it to use at six.

In spontaneous drawing he makes a single outline drawing with few details. He may attach the back and front door to the sides of a "house" or he may draw a square for a house making an indentation at the top and bottom for the two doors. He recognizes that his result is "funny."

Handedness is usually well established by five and the 5-year-old can identify the hand which he uses for writing. His initial approach is with the dominant hand and he does not transfer a pencil to the free hand. In block building he alternates the use of the hands but the dominant hand is used more frequently. This is also true when he points to pictures.

When maintained in a sedentary position he becomes restless, lifts his buttocks from the chair, turns to the side or stands, but he remains within the radius of the table and chair. Tensional outlets are brief. With his free hand he may scratch, brush, poke or touch any part of his body (on the side of that hand),—parts of his face as well as arm, leg and clothes. He may also sneeze or have to blow his nose.

§ 2. PERSONAL HYGIENE

Eating

Appetite. The shift to a better appetite noted at 4½ years of age is fairly well established by five. This does not, however, mean that all meals are uniformly better. Two meals a day are good and the

third one, usually breakfast, is relatively poor. An illness or an operation does not upset this established appetite as would have been the case at an earlier age. The decrease in appetite during an illness or operation is often actually followed by a definite increase during the convalescent period.

FIVE is interested in completions, even to the extent of cleaning his plate. He is slow in accomplishing this, but he is persistent. His appetite is better than his ability or interest in feeding himself; so he not only accepts help but often asks for it.

Refusals and Preferences. FIVE likes plain simple cooking. For his main meal he prefers meat, potatoes, a raw vegetable, milk, and fruit. Gravies, casseroles and even puddings may seem too complicated and artificial to him. Cooked vegetables, especially the root vegetables, are in special disfavor. Cereal is continued mainly through the will of the parent and may be accepted only if fed by the parent. The child is influenced, however, both in his preferences and in his refusals, by the example of others. He is also influenced by radio programs and may even accept turnip greens because of their vitamin content. He will accept new foods at the family table if he comes only a few times a week, at a restaurant, at a picnic, or when a guest joins the family group.

Self-Help. FIVE is expected to feed himself and on the whole he does a fairly skillful though slow job of it. Many FIVES, however, still need help, especially toward the end of the meal and with foods like cereal to which they are not partial. They eat better and faster if they eat most of their meals apart from the family table. FIVE is beginning to use a

knife for spreading, but he is not yet ready to cut his meat nor will he be ready for some years to come.

Table Behavior. Manners take on little significance until the child has a good appetite and is able to feed himself completely. Therefore FIVE still has a little respite before the torrents of criticism begin. Moreover he frequently eats his main meal at night in the kitchen, apart from the family group, where he does so much better because his mother is moving about without paying too much direct attention to him. Having his meal with a sibling may help or hinder his eating. If he has been eating in his room, a promotion to the kitchen is a good stimulus. A few meals a week with the family give a further impetus, but this does not mean that he can hold up to an improved level at all meals.

If he comes to all meals, including dinner at night when father is at home, he usually wiggles in his chair. He does not get up and run around or ask to go to the bathroom as he did at four. But he usually brings his conversational ability to the table and tends to monopolize the conversation. This interferes with his eating and slows him down considerably. If it can be arranged for him to eat the main course in advance of the family meal he eats better, and can handle dessert with the family. However, FIVE likes to conform and will if reprimanded make an effort to improve his behavior, though he may need very frequent reminders. He may still wear a bib, though many now wear a napkin, tucked in at the neck.

Sleep

Nap. A fair proportion of 5-year-olds still nap occasionally. The nap seems to be an anti-fatigue adjustment. A 5-year-old may

nap if he goes to morning kindergarten, or if he goes to afternoon kindergarten may nap on Saturday and Sunday only. Or he may nap on rainy days. In any case he does not usually have more than one or two naps a week. Boys are more likely to nap than girls, and a few may nap as often as five out of seven days, and for one to two hours.

The majority of 5-year-olds who do not nap usually do not take a rest period spontaneously. They may however ask to go to bed early at night. They do not resist a planned "play nap" of half an hour to one hour if provided with something interesting to do (coloring, modelling with plastecene, building structures with Tinker toys and Lincoln logs). The child rests better if his mother is resting in her room at the same time, and he especially enjoys an alarm clock set to ring when his play nap is to be ended.

Bedtime. The 7 P.M. bedtime persists with many; some delay until 7:30 or 8 o'clock. Usually the child has been read to before he starts for bed. He often prefers to have his mother precede him to turn on the lights. Getting ready for bed usually goes smoothly. Some continue to take a toy animal or doll to bed with them but many have given this up. However this does not mean that the child will not return to his pets at a later age when he needs them more.

Some who do not fall asleep quickly ask to "read" or to color for a while. Others fall asleep at once without any desire for pre-sleep activity. Still others like to lie quietly in the dark, singing to themselves or carrying on an imaginary conversation with another child. These conversations often deal with feats of prowess such as beating up another child or shooting wild animals.

A few still get up frequently, demanding a drink, something to eat, or the bathroom, but most can take care of their own needs without bothering their parents, though they report what they are doing. Usually FIVE falls asleep about half an hour after he starts to bed. A few remain awake until 9 P.M. Sleep may be delayed because of a too exciting day, the presence of company, or anticipation of the parents going out for the evening. If the child has trouble getting to sleep it sometimes helps to put him in a parent's bed, removing him later to his own bed.

Night. Some children sleep through the night but many have their sleep interrupted by need for toileting or by dreaming. This is the age when parents often waver as to whether the child should be picked up routinely to be toileted, or whether he is ready to sleep through the night. A trial of not waking him up either reveals that he no longer needs to be toileted, or that he awakens by himself, usually after midnight, and calls for his mother. Some actually toilet themselves, but feel that they must report to their mother before going back to bed. Usually there is little difficulty in getting back to bed and to sleep.

Dreams and nightmares definitely invade the sleep of many 5-year-olds. Frightening animal dreams predominate. Many children awaken screaming, have difficulty in coming out of their dream even with their mother by their side; finally with the help of shifting to another room or being toileted they wake up, realize where they are and go back to sleep again. Usually it is difficult for the child to tell you much about this type of nightmare. It is amazing to see how quickly the child generally quiets at his parent's touch or voice. The 5-year-old is

beginning to talk out loud in his sleep, usually naming his mother or a sibling.

Morning. Most 5-year-olds awaken at 7 to 8 A.M. after an eleven hour sleep. They often obligingly sleep later on Sundays. The earlier-than-7 A.M. risers are often those who continue to take naps or those who are put to bed very early. At this age children may be expected to take care of themselves on waking, to close their window, put on their bathrobe and slippers, toilet themselves, and occupy themselves in bed with coloring or books until it is time to get up. A 5-year-old can often be very helpful with a younger sibling, even to the extent of changing wet pajamas. He no longer demands to go to his parents' bed in the morning for he is now quite occupied by his own activities.

Elimination

Bowel. It is customary for the 5-year-old to have one movement a day, usually after a meal. This is most commonly after lunch, and if not then, more often after supper than after breakfast. The 4-year-old tendency of interrupting a meal to have a movement is not characteristic of FIVE. But the child may, at the end of a meal, complain of a "terrible" pain, which is usually related to a need to have a bowel movement. Those children who are reported to function at "any old time" often show an increased constipation and a tendency to skip a day or two. This is more true of girls who need to be checked more carefully. They are helped by the suggestion that they must sit at the toilet long enough to function. Prune juice or some mild laxative may be needed. There is less interest in reporting on their movements than there was at four. A number are still in need of help in being wiped.

Bladder. Although Five takes fairly good responsibility for toileting, he urinates infrequently and is likely to put off going to the toilet when he actually needs to go. Wriggling and hopping on one foot are obvious clues to the adult. Some children are subject to fairly frequent intervals, and may need to be interrupted during a morning or afternoon play period with a bathroom reminder before it is too late. They may resist this interruption, but come more willingly at the prospect of a snack or in answer to a bell.

Certain girls need to be watched for sore, reddened genitals. This is easily controlled with a bland salve. This condition may possibly be related to masturbation, but may also be a developmental or individual characteristic.

Night accidents are infrequent but night toileting, as discussed under *Sleep*, is still relatively frequent. The child is either toileted routinely or he awakens and calls, or he may be able to go to the bathroom by himself, reporting to his parents that he has gone.

Bath and Dressing

Bath. The bath is now accomplished with a fair amount of speed and real child participation. The child cannot yet draw his own bath water, but this is in part related to his fear of the hot water tap. He definitely wants to help wash himself, especially his hands and knees. He is apt to get stranded on one knee, washing it over and over, and needs to be shifted to his other knee or to some other part of his body. Many mothers prefer to bathe the child themselves, and have it over with; others use this as a reading period, at the same time supervising the child part by part throughout his bath. A few children still cling to boat play during their bath.

Dressing and Care of Clothes. Parents commonly report that "he can but he doesn't" dress himself. Undressing is still easier than dressing. Five does better at dressing if his clothes are laid out singly on the floor. Otherwise he is still apt to get them on backside to. He can now handle all but back buttons. Shoelace tying is usually beyond him, and those who are able, tie too loose a bow.

A fair number of 5-year-olds handle the task of dressing without too much prodding. Others, however, are self-motivated only when they are eager to be ready for the next happening, or to surprise their parents. Some are able to choose two or three days a week when they will be responsible for dressing themselves. The other days are the mother's days when she will be completely responsible. His own days may be marked on a calendar; he is becoming interested in the calendar as a guide and record.

Children take little responsibility about their clothes at this age, either as to selecting them, laying them out, picking them up after they have been removed, or keeping them in good condition. Even those girls who are clothes conscious and proud of their appearance, do not take good care of their clothes.

Health and Somatic Complaints

On the whole the 5-year-old's health is relatively good with the exception of the communicable diseases which increase in number from the fourth year on. Whooping cough, measles, and chicken pox take the lead. Some will have only one or two colds during the winter months, which is in startling contrast to the repeated colds of the 4-year-old.

Stomach aches are fairly common and are related both to the intake of food and the need to have a bowel movement.

Stomach ache may follow the ingestion of foods the child does not like, or the too rapid taking of food. If the child is pressed to finish his meal in too much hurry, he may vomit.

Tensional Outlets

The majority of tensional outlets are related to pre-sleep activity. Thumb-sucking may still occur in a few children, but only prior to sleep. With some it occurs only once a week or once a month. Others use comfort objects such as sheets, blankets, pillows or toy animals to help them go to sleep more quickly. Many are reported to have given up these habits, or are in the process of giving them up.

FIVE is a good age to plan to terminate thumb-sucking. The parent needs to differentiate between the child who is going to be able to handle it by himself and the one who needs help. Maybe the voluntary giving up of the object related to the thumb-sucking will break up the pattern. Then the child may need help in going to sleep, such as having his mother sit beside him or having her return the sleep-inducing object if he cannot get along without it. Strapping the thumb with a band-aid, or planning for some much desired object (such as a kitten) may provide the necessary motivation. In any event, the plan should not be imposed but should be so fully discussed with the child that it becomes his own plan.

The hand to face response manifested in nose picking, nail biting, or any hand to mouth gesture, is fairly common at five. Nose sniffing may be so repetitive as to resemble a tic. Those who do not show their tensional outlets in these restricted ways do so in their interpersonal relations, especially with their mothers. They are either stubborn and resistant, or whiny and cranky. Others are still expressing 4-

year-old out-of-bounds tendencies. They continue to be overactive and noisy, and may take a slight flaw in a toy as a suggestion to destroy it completely. Personality factors influence the ways in which tension is released.

§ 3. EMOTIONAL EXPRESSION

FIVE has largely overcome his 4-year-old out-of-bounds, runaway, neighborhood visiting tendencies. Home is to him often indoors and preferably within earshot of his mother. He is said to be very helpful. Though he is a great talker, he deliberates before he speaks and does not plunge in headlong as he did at four. FIVE is often seeking an answer. He is not only helpful but is often truly cooperative. He does not act before he asks permission. Though he may have been jealous of a younger sibling, he now adores this same sibling and is protective and helpful in taking care of him.

FIVE is poised. He has new inhibitory controls and anticipates immediate happenings well. Nevertheless he may be too excited by an anticipated event if he is not prepared long enough in advance. His eating and sleeping may be disturbed and he may become very shy or overactive when the actual event occurs. He has given up most of his 4-year-old brashness, and no longer shows off before company. The ringing of the telephone may induce him to answer it. When he was younger, his mother answered, while he seized the occasion to run for the cookie jar.

This inhibitory poise makes FIVE capable of a new kind of determination,—a positiveness which he uses to get his own way and to follow through his ideas. It also makes him a little dogmatic, so that he has only one way to do a thing, only one answer to a question. It is important

to recognize this as a temporary and perhaps useful growth trait. If you contradict him or try to make him more broad-minded, he will contradict in turn and will argue as long as you will allow him to. You usually lose the argument, or at least you should lose. If he is pushed too far he will become angry and then cry or call names, for instance calling his mother a "naughty girl," "dirty rat," etc. If he is spoken to sharply or scolded he will usually cry. But for the most part he tries to hold his own ground and is less likely than formerly to rush off to seek comfort in one of his special comfort toys. His mother can help him to control a wayward action by interjecting a magic word such as "tent" (the word may work like magic if the child is very eager at that time to have a tent given to him).

Some Fives do not function well unless they get off to a right start. You can often get the child to adjust to your demand if you help him to carry out your idea in his own way. That is the way in which your way and his way mix. He cannot change in midstream; he must start all over again. One 5-year-old who had started a day on the wrong foot and had kept in this groove, finally wept when the day was half spent and said, "I wish I could start Sunday all over again."

§4. FEARS AND DREAMS

Fears

FIVE is not a fearsome age, nor is it an age of over-awareness. Even though the child has been previously frightened by tales of witches, ghosts or bogey-men, he may no longer fear them because they have so little reality for him. Dogs are somewhat less feared than formerly. He may still say he is afraid of things, though his fears are actually receding in intensity.

FIVE is, however, beginning to have fears which may be more extreme at 5½ and 6 years of age, such as the fear of certain elements: thunder, hard rain and the dark.

His outstanding fear is that he will be deprived of his mother,—that she may go away and not come back, or that she may not be at home when he returns from school or that she may be gone when he awakens in the night. This may be a difficult period for the mother because it confines her to her home, even when the child is asleep. It is essential, however, to work out a satisfactory adjustment with the child so that his fear will remain under his control. He may be induced to accept the protection of some other person in his mother's absence. Or it may be that all he needs to make him feel secure is the telephone number which will reach his absent mother.

Nighttime heightens his fears. Thunder at night, sirens at night, are far more frightening than in the daytime. He is less afraid of the dark, but he still likes to have his mother precede him upstairs at bedtime. He often likes a light on in the hall or bathroom and likes to have his door a little ajar. If his mother tries to talk him out of it he may say, "But the darkness gets into my face."

Dreams

FIVE's sleep is often broken with dreams. These are usually unpleasant, and are most frequently about wolves and bears that get into bed with him. They may bite and chase him but this active aggressiveness is more common at 5½ and 6 years. Often FIVE wakes screaming because of the frightening quality of his dream. He is usually quieted fairly easily, though it may take some time to awaken him from a nightmare and also before he

will go back to sleep after being awakened.

The dream may be reported at once or in the morning. Other dreams are only reported if some daytime experience helps the child to recall them. For example, one child was reading with her mother a story about a green frog, when she suddenly stopped and said, "Green, green like the woman. You know I don't think she should pop out from the floor and frighten me." Those who have nightmares are unable to report anything about their dreams. Others, judging from the elaborateness of their reporting are probably making up the dreams they report.

Wild animals and strange or bad people which frighten the child are most conspicuous in 5-year-old dreams. There are also dreams of activity in connection with the elements, flying through the air, jumping into water, being near a fire. These occur usually in a rather unpleasant, frightening connection. Everyday events and familiar persons (mother and playmates) are beginning to appear in dreams, but they are not yet taking a prominent role.

§ 5. SELF AND SEX

Self

FIVE is more self-contained than he was at four; he is more of a person. He is serious about himself and is much impressed with his own ability to take responsibilities and to imitate grown-up behavior. He is rightly spoken of as more mature. He may not seem as independent as he was, but he is more aware of the relationship of his acts to people and to the world around him. He is shy in his approach to people, but he builds up a slow steady relationship which makes FIVE one of the favorite ages of childhood for the adult. With things as with

people, FIVE likes to prepare and plan for happenings in the near future rather than to have them sprung on him.

He is secure in his relationship with his mother. She is as much himself as he is. It is essential for him to hold an even give and take with his mother. He is naturally obedient, he wants to please, he wants to help, and he asks for permission even when it is not necessary.

FIVE shows a remarkable memory for past events. He can hoard thoughts in the same way in which he hoards things. Through his questioning he builds up an impressive fund of information. And as with everything else about FIVE, there is a certain orderliness to what he thinks as well as to what he does.

FIVE lives in a here and now world, and his chief interest in the world is limited to his own immediate experiences. He likes to stay close to home base.

Sex

FIVE as a rule does not dwell upon sex questions as he did at four. His interest in sex is chiefly in the baby, in the having of a baby. This interest is manifested even in FIVE's mothering tenderness toward a younger sibling. Although he may have asked in an earlier year, "Where do babies come from?" he re-asks this question at five. All he wants to know is that the baby grows in its "mommy's tummy." He is rarely interested in how the baby started. The use of the words "seed" or "egg" reminds him of vegetables and chicken's eggs and may serve to confuse him rather than to help him. He readily accepts a statement as it is given and then repeats it with little meaning. One 5-year-old introduced his baby brother to some visitors thus: "This is my baby brother. He came from a seed."

Some FIVES still cling to the idea that

you buy a baby from a hospital. They may even solve the problem of the sex of the baby by declaring that the hospital gives out boys on certain days and girls on other days. Very few FIVES are aware of the enlarging abdomen of pregnancy, nor do they grasp the idea of the growth of the baby within the mother. A few girls are concerned about how the baby gets out and may spontaneously think that it comes out through an appendix scar if they have seen one.

As mentioned above, the real interest of the 5-year-old is in the baby rather than in its antecedents. Boys as well as girls desire to have a baby of their own. Some FIVES relate themselves back to the time when they were in their mother's stomach. They like to talk about this and to ask their mother if she remembers all about it. Or they like to relate themselves to the future when they are going to have a baby of their own. Or on noting a slight distension of the stomach in themselves, will conclude that they are going to have a baby, or maybe a doll. A child may dramatize the birth process by suddenly bringing forth a doll tucked between the legs! Another child of similar age may have a more critical sense of the realities. One 5-year-old was heard to ask another 5-year-old, "Are you old enough to have a baby?" "Goodness, no," was the reply, "I can't even tell time yet."

FIVE rarely plays the game of "show," exposing genitals or buttocks. In fact FIVE has become rather modest, especially about exposing his body to strangers. He may even display modesty before a maid or a younger sibling. He is aware of the sex organs in others when exposed and also of accessory sex characteristics such as pubic hair or breasts. Although he knows that difference in sex is indicated by the sex organs, he is still apt

to differentiate boys from girls by hair cut or by name. There is still some perplexity in the minds of some FIVES as to why a sister does not have a penis or why a father does not have breasts. Some FIVES may express a desire to become the opposite sex. Others emphasize their own sex by discarding any plaything they possess that may be related to the opposite sex. Boys, for instance, may emphatically refuse to play with such feminine toys as dolls or ironing boards.

§ 6. INTERPERSONAL RELATIONS

FIVE is that delightful stage when one takes life as it comes. On the whole he does not ask too much of life nor does he give too much. His life problems are restricted in scope and easy for him to handle. His mother finds him a joy to have around the house. He is so helpful, he is always within earshot, and he keeps his mother posted about his activities by always asking permission. He has endearing ways of showing how much he adores his mother. One 5-year-old girl who had some difficulty about her mother's departures, expressed it this way: "My stomach hurts. I begin to cry; and when you come back, oh I'm so happy!" Another Five who was trying to be more obedient, whispered in her mother's ear, "I've got a surprise for you. I'm going to say O.K. every time you speak to me."

Fathers also come in for their share of a 5-year-old's affection. The father, however, is rarely the preferred parent. FIVE is fond of his father, proud of him, may obey him better than the mother, but he may not take punishment as well from his father as from his mother. In the insecurity of the middle of the night he wants his mother most of all. If, however, the mother is sick, some FIVES who have been

slow to build up a relationship with their fathers will now accept them. Fathers may not receive as much affection from the child as do the mothers, but on the other hand they do not receive as much disparagement! It is the mother who receives the brunt of the child's outbursts. It is the mother who is called the "bla-bla mommie"; and who is threatened with "I'm not going to play with you any more. You're a bad mommie."

FIVE is showing greater ability to play with others. He may play very well with a younger or an older sibling. He is less bossy and is now helpful and even devoted toward a younger sibling. He is protective and mothering. Oftentimes a 5-year-old boy is said to adore his younger sister. Nothing makes him more fighting mad than the threat to take away his baby sister. But life is not always smooth between siblings. Indoor play is poorer than outdoor play and needs supervision and planning. FIVE has moments of jealousy when a younger sibling is receiving all the attention, and he is capable of blaming some of his acts on a younger sibling. Because FIVE adjusts so well to a younger sib, parents sometimes overlook the fact that the younger child can be too much of a strain on a docile 5-year-old.

FIVE likes best to play with children of his own age. Some FIVES prefer their own sex, some the opposite sex, and others accept either readily. FIVE, since he is such a home body, is fairly dependent upon the children who are available in his neighborhood. Most FIVES play best out of doors. Some play best on their own home grounds, others away from home or in some neutral spot such as a park. A group of two is optimal. Whenever there are three in an unsupervised group, two usually gang up on the third. It is wise for the parent to hold to the simple rule

that the child may invite only one child at a time until he is able to handle more, which is at seven or more usually at eight years of age. Sometimes FIVE responds best to an older child and may even take a minor part in neighborhood group play, accepting the role of baby in house play and leaving when he does not wish to compete. The bossy FIVE usually does best with a younger child who will accept being bossed. But even the bossy FIVE will take turns in playing other children's ways if part of the time they will concede to play his way.

Certain pairs of children from five to eight years of age prove to be incompatible for play. They seem to find no common ground except arguing and fighting. These very same pairs may become bosom friends at the age of eight or nine. Thrusting them together too often before they are socially ready does them no more good than to give them complicated reading material before they are ready for it. Some amenable FIVES need to be protected from being held too long in a social situation, because they may explode in a savage manner which might easily have been prevented if the parent had recognized the emotional fatiguability of the 5-year-old.

§ 7. PLAY AND PASTIMES

In General

When FIVE is asked, "What do you like to do best?" he is likely to answer with simply one word: "Play." And he is indeed a good player. He has his body under more smooth, skillful control and is therefore capable of play without too much adult assistance. With increasing age, differences in personality and sex become more evident in what the child chooses to play.

FIVE shows a craving for the standard kindergarten materials. He paints, draws, colors, cuts, and pastes. He specially enjoys cutting out things and is happy when provided with an old wallpaper book. Sometimes he cuts paper into shreds simply for the sake of cutting. On occasion he slips over from paper to cloth and takes gorges out of his clothes. He still needs to be watched when he is using scissors.

Blocks continue to be highly favored play material both for boys and girls. Girls build houses for their dolls and project personal situations, whereas boys build roads, tracks, bridges, tunnels, and use their houses for tanks, airplanes, army trucks and fire-engines. Houses play an important role in 5-year-old play behavior. FIVE likes to make big houses with big blocks, or tent houses of chairs draped with blankets. He wants to get into them, but he does not really play in them after he has entered.

Babies are another outstanding interest of the 5-year-old. Dolls are used as babies. And this interest is by no means restricted to girls. Boys too want to play dolls, dressing them, putting them to bed and most of all taking them for a ride in their carriages. Unhappy is the 5-year-old boy who craves a doll for Christmas and finds a stuffed animal in its place. The culture is unknowing in the ways of development or it would not act so arbitrarily. The interest in dolls is so strong that it is briefly shown at this age even by those girls who later scorn dolls.

FIVE's interest in houses is also expressed in his imaginative reenactment of domestic happenings. Boys join in this play as well as girls, but many boys prefer war games to the milder forms of house-play. Hospital-play is not as strong as it was at four, and school-play is not as strong as it will be at six.

Gross motor activity is a favorite with FIVE. He rides his tricycle with speed and adroitness. His tricycle moves freely, less hampered by the trailing equipment which he so delighted to hitch on when he was four. FIVE swings, he climbs, he skips, he roller skates and he jumps from a height. He may take to climbing trees or to jumping rope. He may attempt acrobatics, trapeze tricks, and even stilts.

Girls are likely to prefer sewing and boys carpentry. Boys already may show a well defined interest in tools. Their earlier tendency to destructiveness, their interest in taking things apart, may now be expressed in play with tools.

Reading and Numbers

There is nothing that a 5-year-old likes better than being read to, although he may spend considerable time in looking at books himself and may even pretend to read. He prefers stories about animals that act like human beings. He shows marked fondness for first grade readers which tell about occurrences in the lives of children. A few FIVES may like to listen to a reading of comic strips, regardless of whether they understand them.

FIVE is becoming more aware of the rudiments of reading and arithmetic. He is interested in copying letters and numbers. He enjoys playing simple letter and number games with his parents. Often this type of spontaneous interest is not satisfied in the home for fear that the school methods of teaching will be interfered with. The school might well recognize that home and school methods are not necessarily in conflict and that they can be used together advantageously. Any child who shows this spontaneous type of interest at home should have it satisfied.

Music, Radio and Movies

FIVE prefers his own gramophone records to the radio. He likes to play them over and over again. He likes a combination of music and words which tell a story. He may listen to the radio a little and shows a preference for the advertisements perhaps for the very reason that the adult dislikes them—he likes the catchy songs and the repetition.

Some FIVES can pick out tunes on the piano. They like to be taught how to play a few familiar melodies and they are apt to play the same song over and over again. They may sing with their records, or they may translate the music into dancing. FIVE enjoys dancing, especially at the bedtime hour.

§ 8. SCHOOL LIFE

Being such a home body, FIVE is well adjusted at home and is ready for the experience of being with children of his own age, especially in a supervised group. He usually adjusts with relative ease even though he has not had previous school experience. He may want his mother to accompany him to the threshold on the first day but may not want her to enter the schoolroom. The adjustment to one adult at a time is easier for him. Girls are more apt to want continued support of this kind for several days or a few weeks. An older child may substitute for the mother until the child is ready to go on his own. Going on a school bus sometimes solves this problem.

Girls are more apt to like school than boys. Boys complain when they are not provided with enough outdoor activity or when they do not have "large blocks." Spirited children may complain that "the teacher makes me do things," "the teacher

makes me stay in line," or "I want to draw what I want to."

On the whole the health of the kindergarten is remarkably good. Some show fatigue every ten or fourteen days and a day at home with mother may be welcomed. With some children it may be advisable to plan for a four-day week with Wednesday at home allowing a two-day span, or for a four-day week with Monday or Friday at home.

Sometimes a miraculous change occurs at school and the very child who may be "bad" at home becomes "good" at school. The opposite is also possible and usually indicates that the child is not yet ready to adjust to a group situation unless he is permitted and helped to participate only on the outskirts of the group.

There is less carry-over from home to school and school to home than there was at four or will be at six. So FIVE takes fewer things to school although he may still like the security of a favorite toy which he clutches en route and then stores in his cubby. A few bring books for the teacher to read to the class. FIVE takes his handiwork home from time to time, but he is more interested in securing his teacher's immediate recognition than in taking things home for his mother's approval.

FIVE usually is not communicative about his school life. He may report that another child hit or pinched him, that the teacher made him do something. Parent and teacher profit on occasion through communicating by telephone in regard to an episode which may have occurred at home or at school.

On arrival at school, FIVE goes directly to his room and teacher. He needs some assistance with the removal of clothes and asks the teacher when he needs help. However, dressing for outdoor play or for

going home is quite a different matter. Many children are not ready to take this responsibility and some need to be dressed entirely. An older child who calls for him may take over.

FIVE enjoys a routine, and adjusts well to an activity program which allows freedom of movement and yet maintains control of the sequence of separate activities. The morning may start with a free play period when he chooses blocks, carpentry, puzzles, painting, coloring, clay or house play. He changes from one activity to another. He usually completes a task although his attention may shift to watch another child at work or he may go to the teacher to tell her of a personal experience or to show her his product. Boys as well as girls play house. Daily routines such as washing, telephoning, shopping, with occasional episodes of doctoring are enacted. Boys prefer blocks; girls, houseplay.

Transitions are fairly easy for FIVE. With a word of warning from the teacher he completes his task and with some help from her puts materials away. He is then ready for the next activity, perhaps a discussion and a music period followed by a snack. Rest is often resisted if it is imposed at five; some children may not want to come to school because of it. Some, however, respond and others may follow suit. A simple song or story may accompany a short relaxation period.

The group enjoys a directed activity period of about twenty minutes, in which a simple task can be completed. This directed time may also be utilized for copying or recognizing letters, learning to print one's own name, or counting objects in the room.

Much of FIVE's reading and number work is closely associated with his play, both at home and at school. He can pick out capital letters, first at the left or right

of a page and then at the beginning of a sentence in the text. Later he reads letters in combination such as "C-A-T" and asks what they spell. Signs are of particular interest to him and he may like to add a sign to his block structures. He may also add wooden letters for people such as A for Ann or S for Susan. He likes to identify repetitious words in a familiar book such as sounds the animals make or exclamatory words. At five-and-one-half some children pretend to read from a book which they have memorized; others like to underline the words they know.

FIVE enjoys counting objects; he tells how many toys he has. He can copy numbers and may write some from dictation. During the year he learns to identify a penny, nickel and dime. Attempts to add or subtract within five are made with or without using fingers or objects. Being "five" has tremendous significance to him. He is more likely to tell you that he is five years old than to tell you his name.

The directed activity period may be followed by story time which is a high light for FIVE, particularly when the story is dramatized after the reading. Stories with repetitive action and phrases are favorites, especially stories about animals, trains or fire engines.

Outdoor play usually comes at the end of the morning but is variable according to season and weather. Since FIVE is very much aware of both, it is helpful to have a large porch where most of his activities can be carried on during clement weather. Sand box, swing, large blocks and jungle gym are favorites. Sometimes an excursion is planned to a nearby farm.

The 5-year-old's morning at school is on the whole quite smooth. The here-and-nowness of FIVE requires immediate attention and thus the teacher circulates about the room ready to help, listen, or

handle an emergency such as paint spilling. She provides the setting and materials for his experiences and is sought for approval and for affection.

FIVE works in short bursts of energy. He shows the same tendency when he suddenly shoves, strikes out or throws blocks or stones. He may learn to inhibit impulsive attacks by being told that "it hurts." His play is predominantly on his own even though he likes to be in a group. He goes from one activity to another usually completing each. Similarly he changes his postural orientation: he sits in a chair for one activity, stands for another, sits on the floor or on a table for another. He resents interference with his materials but he may be very obliging and provide an article on request. Some children may need to be separated from the group in play but at this age they usually can be removed to the outskirts without actual isolation.

The teacher's voice can ordinarily be heard above the chatter in which the children tell each other what they are doing, or repeat what a neighboring child has just said. Typical remarks are:

"Guess I'm through with that side"
 "I'm going to do my work"
 "Going to do your work, Susie?"
 "I can't"
 "Tommy, did you say I can't"
 "Look at my house"
 "Look at her house"
 "Now make the grass"
 "Da-da-da-da; dum-dum-dum"
 "I want to save mine"

A desire for toileting is announced and a response expected from the teacher. FIVE may wait until the last minute but can care for himself. Boys may grab at their genitals and girls may wriggle or place hands on thighs. If FIVE holds off too long, particularly when outdoors, he may have an "accident." A boy may on occasion urinate out-of-doors. FIVE, how-

ever, accepts a suggestion to go to the toilet before it is time for outdoor play.

Kindergarten activity is not highly social. In free play two, three, or four children may sit at the same table to crayon or to mold clay but they work independently and readily leave for play in another part of the room. The same grouping is evident at the sand box. Housekeeping may hold a larger number together for a while. Toward the end of the year two children may be found building cooperatively on the same block structure.

§ 9. ETHICAL SENSE

FIVE's poise is sustained because his own needs and the environmental demands are rather equally balanced. FIVE is a part of his environment and his environment is a part of him. Thinking of him in these terms it becomes easier to discern the quality of his ethical sense, which is so new and so tentative that it can hardly be classed as such.

FIVE enjoys helping his mother and running errands. He likes to please, to do things in the right, accepted way. He does not usually resist a request with "I won't" as he did at four, but he may hesitate between a refusal and an acceptance. He may refuse to do things because he cannot do them, or because he is too busy to do them. Sometimes he is motivated by a simple reward. Although he likes praise, his need of it is not as great as it will be at six. His asking for permission or his telling what he is going to do indicates how much he has identified himself with his environment. The answer to his request seems often to be needed as a starter.

Making up his mind is not too difficult for he has not many alternatives to choose between, and he is apt to make a conforming choice. He can, however, change

his choice, for he is susceptible to reason or to an explanation. And since he wishes to oblige, he may shift to his parents' side. A few FIVES are more rigid and by simple device can be jostled into line.

FIVE is often spoken of as being markedly good, "like an angel." His sense of good and bad, if he has any, does not differentiate right from wrong. He either takes his behavior for granted, or thinks only in terms of his practical relationships to other persons. FIVE is "good" because he loves his mother and wants to please her. FIVE does not want to do "bad" things, because such conduct annoys people and makes them uncomfortable. A few FIVES are unusually concerned about being called bad. This is worse than a spanking to them, and they may appear to be ashamed of it. But at the same time they may compulsively handle their fear of being called bad by playing "bad school." In "bad school" they jump on tables and run around the room screaming—behavior which they believe not to be acceptable in school.

If FIVE does something he should not do or did not want or mean to do, he is likely to blame the nearest person. If his mother is close by, the child may accuse her with a "Look what you made me do." A sibling, a dog or another child may be blamed when they are a part of the scene of action. There may be more validity to this accusation than one at first realizes. When a child is running down a hill and meets another child, there is no doubt that he may show an unsteadiness in his running and finally fall. The other child did not push him, but the other child's presence did remove his attention from his running. He could not do the two things at once—both look at the child and run. It is very significant that during the pre-school years serious accidents do

occur when the mother is right beside the child and yet not giving her full attention to him. He becomes dependent upon her if she is there, whereas if he had been on his own he might have exercised his usual caution and not come to grief.

FIVE enjoys the possessions he has. He is not as eager for presents as he was at four, nor does he brag about his possessions as he did earlier. This does not mean that he is careful about his possessions.

A few children take things home from school, such as toys or books, but readily and willingly return them. At home the 5-year-old may take things from the kitchen, or a girl may desire and take some of her mother's powder or perfume.

On the whole FIVE is relatively truthful. He believed his fanciful tales at four, but by five he knows that he is fooling, and has his tongue in his cheek. Sometimes his tales are self-protective, though oddly so. One 5-year-old who was late for dinner told his parents that "a big boy said he was going to kill me so I couldn't come home." Other fanciful tales may indicate a wish not yet fulfilled. The 5-year-old girl who reported that her teacher said she read well enough to read with the first grade, was obviously expressing an unsatisfied longing. Such a girl might well be ready for early reading.

§10. PHILOSOPHIC OUTLOOK

Death and Deity

The vast intangible creative force called God is often grasped rather well by the mind of the 4-year-old. But FIVE does not soar as high and has a tendency to bring God within the scope of his everyday world. He asks very specific questions about what He looks like, is He a man, what does He do and where does He live? He also conceives of God's world as hav-

ing modern equipment and therefore asks if you can call Him up on the telephone and if He makes cars.

Some FIVES are more aware of God's presence and may even fear that He sees whatever they do. One 5-year-old thought that God pushed him whenever he fell. Others may be rather critical of God and His reported handiwork, for they feel that "God made a mistake when He made a mosquito."

Death likewise is taken in a fairly matter-of-fact way. FIVE seems to recognize dimly the finality of death and may speak of it as "the end." The dead person is to him one without living attributes: "He can't walk, he can't see, and he can't feel." He is interested in the posture of the soldier who falls dead—"Did he fall on his back or his face?" If he is told that dead people go to heaven after they die, he wonders why they don't fall out of heaven.

He has linked up the facts that when you are old you die. He is not usually concerned about his own personal relationship to death, or the possible deaths of those around him. He does, however, recognize the eventual possibility that others will die and states the fact that "When I grow up all you people will be dead." He has not as yet conceived of his own death, but readily enters into the game of playing dead when he is shot.

Time and Space

FIVE in his sense of time is concerned chiefly with the Now. It is difficult for

him to conceive of himself as not having existed or as dying. Time for him is largely his own personal time.

The more common "time" words used by adults are now a part of the child's vocabulary and he handles them freely. He knows when events of the day take place in relation to each other. He can answer correctly such questions about time as the following:

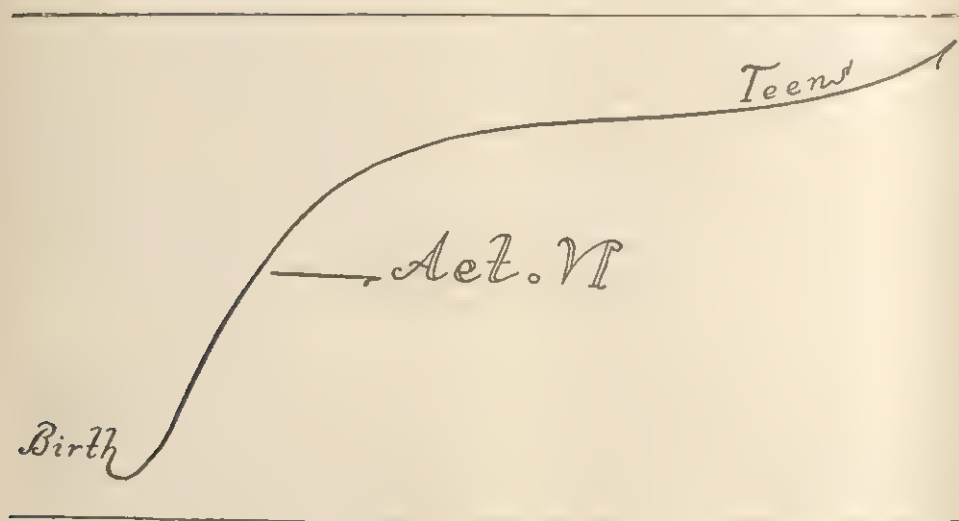
How old will you be on your next birthday?
What day is today?
What day does Daddy stay at home all day?
What day comes after Sunday?
What day do you like best?

Many FIVES are very much interested in the calendar and in the clock. A few copy the numbers on the clock's face and may read them. They are especially proud of possessing an alarm clock of their own, and accept the ringing of the alarm as the time to get up, or to terminate a play nap.

FIVE's chief spatial interest is in what is Here. He is extremely focal, is interested in the space which he immediately occupies. He has little insight into geographic relationships, but does recognize some specific landmarks. He likes to draw roads on very simple maps of his immediate neighborhood. He can now cross streets in his immediate neighborhood by himself and likes to do errands at the nearby store. His interest in more distant places depends upon his personal associations with them.

6

SIX YEARS OLD



BEHAVIOR PROFILE

"HE is a changed child!" Many a mother has said this ruefully, when her former 5-year-old begins to lose his angelic five-year-oldness. "He is a changed child, and I do not know what has gotten into him!"

There is some mystification about this change. At five he was such a well-organized child, at home with himself and at home with the world. But as early as the age of five-and-a-half he began to be brash and combative in some of his behavior, as though he were at war with himself and with the world. At other times he was hesitant, dawdling, indecis-

ive; and then again overdemanding and explosive, with strangely contradictory spurts of affection and of antagonism. At other times, of course, he was quite delightful and companionable. "But I can't understand him. What *has* gotten into him?"

Perhaps nothing more or less than six-year-oldness!

The sixth year (or thereabouts) brings fundamental changes, somatic and psychological. It is an age of transition. The milk teeth are shedding; the first permanent molars are emerging. Even the child's body chemistry undergoes subtle changes reflected in increased susceptibility to infectious disease. Otitis media comes to a peak; nose and throat difficulties rise in frequency. The 6-year-old is not as robust nor as staunch as he was at five. There are other important developmental changes which affect the mechanisms of vision, and indeed the whole neuro-motor system.

These changes manifest themselves in new and sometimes startling psychological traits,—traits which begin to make their appearance at five-and-a-half, as will be indicated in the listing of maturity traits. The 6-year-old proves to be not a bigger and better 5-year-old. He is a different child because he is a changing child. He is passing through a stage of transition, similar to the paradoxical stage of the $2\frac{1}{2}$ -year-old. He also has much of the fluidity and forthrightness of the 4-year-old. Combine the paradoxical and labile qualities of the $2\frac{1}{2}$ -year-old and 4-year-old and you have an indication of the maturity traits of the 6-year-old.

In describing these traits, we shall emphasize those which make the 6-year-old distinguishable from the 5-year-old. The reader will understand that the traits do not descend upon the child with a sudden onrush. The colors of a developmental spectrum shade into each other by imperceptible gradations. But to paint a vivid and usable maturity portrait, we must dip our brush where the pigment is strong. With this much apology to the 6-year-old, we shall now attempt to do him developmental justice,—remembering that such justice tends to bridge the chasm between angels and demons.

The action-system of the child is now undergoing growth changes,

comparable in their way to the eruption of the sixth year molars. New propensities are erupting; new impulses, new feelings, new actions are literally coming to the surface, because of profound developments in the underlying nervous system. These manifold changes probably hark back to psychological increments which were slowly evolved through aeons of time in the remote prehistory of mankind. In the individual, the essence of the racial increments is crowded into the brief space of months and years. The 5-year-old has already come into a fundamental portion of the racial inheritance. The 6-year-old is coming into a later portion. This is "what has gotten into him!"

Psychological inheritance, however, does not come in neat packages. It comes in the form of behavior trends and dynamic forces which must be reconciled and organized within a total action-system. It takes time to pattern and to balance conflicting trends of behavior as they well up in the sixth year of life. Some conflict is a normal accompaniment of developmental progress. So we may take a constructive and optimistic view of the developmental difficulties which the 6-year-old encounters.

He tends to go to extremes,—under slight stress, whenever he attempts to use his most recently acquired powers. As an actively growing organism, he is entering new fields of action. The new possibilities of behavior seem to come in pairs. He is often under a compulsion to manifest first one extreme of two alternative behaviors and then soon after, its very opposite. The diametric opposites have almost equal sway over him, because both propensities have only recently arrived upon the scene. He is inexperienced in their management and meaning. It is hard for him to choose between such evenly competing opposites. When he is away from home, he may even be overtaxed by the simple proposition: "Will you have chocolate ice cream or vanilla ice cream?" A difficult choice,—and one which will not be decisive even after it is made; for an immature child cannot adeptly cancel out a rival alternative. He will not completely forego the vanilla after he has chosen the chocolate. Decisions which were easy or judicial at five, have become complicated with new emotional factors, for he is growing. The complication sig-

nifies increased maturity. The indecisiveness signifies immaturity if we allow ourselves a paradoxical distinction between maturity and immaturity.

Let a poem by Edna St. Vincent Millay bear witness to the duplexity of life situations at the age of six:

Come along in then, little girl!
Or else stay out!
But in the open door she stands
And bites her lips and twists her hands
And stares upon me trouble-eyed:
"Mother," she says, "I can't decide!
I can't decide."

A 2½-year-old child displays a similar difficulty in handling opposites, —in deciding between *yes* and *no*; *come* and *go*; *fast* and *slow* and many another *do* and *don't*. The child oscillates between two alternatives, chooses the wrong; or in quick succession chooses the wrong, the right, the wrong, the right; dawdles, or reaches an impasse, stymied by the two-way possibilities. It is almost as if he were seeing two images, and were plagued with the inability to suppress one image for the sake of clear single vision. Our 6-year-old is suffering from a similar (and likewise temporary) developmental duplicity. He is afflicted with bipolarity,—a see-saw awareness of both ends of a dilemma.

The 6-year-old manifests his bipolarities in many different ways. He flies quickly from one extreme to another. He cries, but his crying is easily diverted into laughter, and his laughter into crying. He sidles up to his mother and says, "I love you," but in another breath he may say, "I hate you, I'll hit you." He will mutter as much to a total stranger. Indeed, if we note the psychological shallowness of his brash verbalizations, his epithets (Stinker!), his profanity (Aw nuts! Doppel!), we can allow with a smile of sympathetic humor that there is a certain naivete in his madness. We must discourage his irresponsibilities, and yet recognize that these warring intensities and impulses are new experiences for

him. Sometimes he seems to be bent upon defining what *not* to do by doing it.

Certainly he is as inexpert in handling complex human relationships, as he once was inept in putting a spoon into his mouth. He frequently misses the mark. Watch him in his social approaches to his baby sister. He may be very good to her, and also very bad, all in the same afternoon or the same half hour. To attribute his badness to sheer perversity or even to jealousy may be erroneous. We are dealing with a general dynamic of behavior, which makes for vacillation, and lack of integration. The inconsistencies of 6-year-old conduct, his tendency to bolt in and out, his tendency to slam, his verbal aggressions, his intense concentrations, his abrupt terminations, his explosive attacks upon situations,—are all cut from the same cloth. An outstanding characteristic of the 6-year-old is his meager capacity to modulate. But we need not despair. With the help of the culture and the help of time he improves that capacity.

His difficulty in making a ready distinction between two-way possibilities is not limited to situations which are emotional or ethical in nature. In his early efforts to print letters of the alphabet he is prone to reverse them. His *B* looks backward. His tendency to reversals may be linked to his penchant for mirror symmetry. He is fond of pairs: 2 and 2 are 4 is easier than 2 and 1 are 3. He can play with one playmate more successfully than with two. In his play there is a good deal of Tit for Tat: I give you a present; you give me a present. You push me; I push you.

Life is charged with double alternatives for all of us, even after we are grown up. The 6-year-old in our complex culture happens to be in a phase of development where these alternatives crowd upon him rather thickly. He is at cross roads where he has to intermediate between contraries. When he does the wrong thing, he is called bad, but there is no use in asking him why he was bad; he has not yet made a clear distinction. He is not fully oriented. He is in new territory. He does not have command of his motor impulses nor of his interpersonal relationships.

At the age of five awareness and capabilities were in better balance. The 6-year-old is aware of more than he can well manage. He often over-differentiates (going to extremes), or he underdifferentiates. He is over-emphatic, or he hesitates and dawdles, or he attempts things which are too hard for him. He wants to be first. He always wants to win. This makes him quarrelsome and accusative on the playground. Yet he wants to be loved best. At Christmas he wants a good many presents, but doesn't know exactly what they should be. He is so active and acquisitive for new experience that his manners are likely to be hasty and sketchy,—a quick Come in, or Thank you; but no prolonged deference or formality in shaking hands! In the profound words of a poetess, herself age six:

Mr. Hullabaloo, Mr. Hullabaloo
He always forgot to say "How do you do?"
Mr. Bahtot took off his haht
And said "How do you do, Mr. Hullabalool!"

It follows that a Birthday Party limited to 6-year-olds is not a model of decorum. Even under adult supervision with a master plan, such a foregathering tends to become a kaleidoscopic medley of high pressure activities,—short shrift amenities as the guests arrive, a pouncing seizure of presents, an excited exchange of favors, everyone expecting the first prize, bubbling bravadoes, scrambles and hullabaloo with interludes of silence induced by ice cream. At no age are children more insistently interested in parties; at no age, perhaps, are they less competent to produce a party agreeable to adult ideals of decorum. Characteristically enough the eagerness of the 6-year-old is not commensurate with his capabilities, particularly under social stress. A philosophic observer will detect evidences of constructive, adaptive behavior even in the confusions and diffusions of a high spirited party. A prudent parent will limit the complexity of the party in advance.

A primary school teacher will see in such a party a display of the same rich energies with which she deals every day as she guides her

group of first-graders. A schoolroom represents the tool and the technique by which our culture attempts to pattern these abounding energies. Fortunate are those children who are entrusted to a teacher capable of interpreting their ebullitions as symptoms of a growth process which needs skillful direction. Such a teacher creates in her schoolroom a cheerful atmosphere of tolerance and security which is hospitable to a certain dramatic quality in the 6-year-old.

What do we mean by this dramatic quality? Not an artificial stage-like make-believe, but a natural tendency to express and to organize new experience through frank muscular reactions. The young body of a healthy 6-year-old is supple, sensitive, alert. He reacts with his whole action-system. He does not only smile,—he fairly dances with joy. He cries copiously when unhappy, kicks and shakes with his grief. Even during sleep he pitches his whole organism into his dreams. Hence the gross arousals of his nightmares, which come to a peak at the age of six. During the waking day he tries on and throws off moods with facility. He uses body postures, gestures and speech to give expression to emotions and ideas which are taking shape within him.

We must remember that the 6-year-old is not simply trying to perfect abilities which he had at the age of five. Nature is adding a cubit to his psychological stature. He is moving into altogether strange domains of experience. He uses his muscles, large and small, to pioneer new pathways.

Dramatic self-activation is at once a method of growth and of learning. It is a natural mechanism whereby the child organizes his feeling and thinking. But the task is too great for him alone. The school is the cultural instrument which must help him to enlarge and to refine his dramatic self-projections. Instinctively he identifies himself with all that happens about him, even with the pictures and the letters in his book and the numbers on the blackboard. Just as he must pick up a block and handle it to learn its properties, so he must project his motor and mental attitudes into life situations. Emotions are not formless forces; they are patterned experiences. The function of the school is to provide personal and cultural experiences which will simultaneously

organize the growing emotions and the associated intellectual images.

Naturally this can be done effectively only through activity programs and projects which will set into operation the child's own self-activity. He learns not by rote but by participation and a creative kind of self-activation. His teacher takes him and his school mates on a trip to a dairy. The children talk it all over some time later, after an interval of assimilation. As an individual and as a tenuous member of a group the 6-year-old translates his experience by building a ground plan of the barn with building blocks. He plans with the group to re-enact part of his experience by dramatic representation. Through all these mediums of expression he clarifies meanings and relationships. There are endless opportunities for similar dramatic assimilation,—*pantomime* of simple actions (I am chopping wood); *portrayal of moods* (a lost child, a tired boy); *tableaux and self-initiated dramatic skits* (school and home life), *dramatized stories with simple plot* (Mother Goose and very simple puppet plays). The ordinary 6-year-old mind is not ready for purely formal instruction in reading, writing and arithmetic. These subjects can be vitalized only through association with creative activity and motorized life experiences. Such dramatic expression must not be confused with rehearsed theatricals or formalized kindergarten play acting. It is a developmental form of self-expression, which must be evoked impromptu and by ingenious indirection. Once a primary teacher has grasped this fundamental principle, she can establish a mutually delightful rapport between herself and her pupils.

For a disadvantaged child a well conducted school is a haven. For the average school-beginner the understanding teacher becomes a kind of auxiliary mother on whom he fixes affection. She does not displace his mother, nor does she aspire to become a substitute mother. But she strengthens his sense of security in the strange world beyond the home. He derives a new confidence in this world from her daily welcomes and assurances, and from the sheer satisfaction of his broadening experiences and from the protectiveness of a partially standardized environment.

He does not wish this environment to deviate much from a familiar set pattern. He likes some social routines. He has to assimilate so many new experiences that he prefers psychological landmarks which remain fixed. He is fond of the rituals and conventions which are reliably repeated each day. He rather likes to see his teacher in a customary location when the program of the day begins. (Sometimes he may even have a passing regret if she changes a ribbon or a coiffure!) Perhaps because he is constantly making new discoveries, he craves a few fixed points in his mental universe.

It is easy to forget that this young discoverer has to adjust to two worlds: the world of home, and the world of his school. The school provides certain simplifications and group controls which the home lacks. His emotional anchorage remains in the home, but he has to acquire a modified set of emotional moorings in the school. The two orientations are not interchangeable and not mixable. Being inexpert in emotional modulations, the school-beginner cannot always shift readily within the two worlds. An ill-timed visit at school from his mother; a mysterious conversation between his mother and his awesome new teacher may produce some jangle of images and attitudes. Often it is hard enough to make the transition when the two worlds are physically separated. He may have difficulty in the morning in leaving his true mother; he may be teased on the trip to school, because a 6-year-old freshman is an easily scareable and teasing victim for the 8-9-10-year-old upper classmen. (Hat snatching and verbal detractions.) And the new customs at school may be so rudely strange that they baffle and disorient.

Parents, teachers and school administrators may be unaware of the complex of factors both inherent and environmental which can undermine the morale of a school-beginner. Sometimes the transition to school is so blundering that it produces gastro-intestinal symptoms and severe emotional reactions. Here individual differences count. The sensitive and immature children suffer most. Difficulties of adjustment are exacerbated if the teacher has a cheerless, disciplinary personality,

if the methods of instruction are over rigid with excess stress on academic proficiency, competitiveness and school marks. In some of these instances the tensions of school entrance are so abnormally weighted against the child that his mental health is overtaxed. School entrance is no simple transition and it should be tempered by flexible arrangements of attendance and program.

Many tensions, however, are normal. They are innate in the very process of child development. Paradoxically, the transitional bipolarity of six-year-oldness makes this a favorable time for achieving psychological transitions. Society has sanctioned the sixth and seventh years for a significant induction into the higher strata of culture. The induction cannot be indefinitely postponed because the child must transcend the limitations of home and also the primitive strata in his own psychological make-up. The race evolves; the child grows.

We have already alluded to certain primitive features in the maturity traits of the 6-year-old. These traits are vaguely characterized by such adjectives as impulsive, undifferentiated, volatile, dogmatic, compulsive, excitable. His spontaneous drawings are crude but realistic, and sometimes suggestive of the graphic renderings of early man, in their portrayal of action, of sky and earth, and of ornamental design. He likes to draw a house with a tree beside it. Wild animals, darkness, fire, thunder, lightning, figure in the fears and dreams of the 6-year-old. Boys and girls alike are naively proud to lose their teeth and have a ready faith in dental fairies, in elfins, and other supernatural agencies.

Although his intellectual processes are concrete and even animistic, the 6-year-old is susceptible to semi-abstract symbols, charms and conjurations. He is highly dependent upon the direction and guidance of adult authority. Witness the modern version of primitive magic in which the incantatory parent counts 1-2-3-4-5-6-7, with the advance understanding that when the magic 7 is intoned, the required deed will be done by the obedient child. The magic works. It is not based on pure gullibility. Even in primitive times magic was close to science. The deliberate counting which can be shortened or lengthened to suit the

needs, gives the child a fulcrum and an opportunity to mobilize the adjustment which he cannot accomplish by his own unaided volition. Like any other guidance device, it should be judiciously used, but it turns a neat trick in overcoming the hobbling effect of the child's bipolarity.

In the long run both home and school will rely not upon magic but upon the utilization of the dramatic potentialities of the 6-year-old, to lead him into new ways of self-control. His dramatic self-projectiveness is one of his most significant maturity traits; and it is constantly available. By means of it he maintains his own spontaneous contacts with the culture; by means of it, also, the culture lays hold upon him and directs him into new participations and anticipations. Much environmental influence comes through automatic imitation and incidental suggestion, both of which are related to his dramatic qualities. The total process of assimilation, directed and undirected, whereby the child acquires his ways of life, is called acculturation.

Since he is given a share in the process he does not become a mere figment of the culture. Through his projections, representative and interpretive, he does not merely reduplicate portions of the culture; he reappraises and reorganizes himself in relation to the culture. He begins to see himself and his bipolar opposites in their social contexts. He thus lays the basis for self-appraisals and for evaluations which come to fuller flower in the seventh and eighth years. The social setting of the schoolroom is indispensable to this process of self-organization. His individual creative activities, his participation in group enterprises, his contribution to group planning,—all provide him with a scale of values. He finds he cannot go too far in sheer self-expression in a democratic schoolroom. He must have regard for others. It is fun to make others laugh and perhaps to lead them; but it is also fun to see what they can do. And everybody makes mistakes, himself included. So he slowly builds up that social perceptiveness of proportion and disproportion which is the essence of common sense and which is also part of the saving sense of humor.

We know of a teacher* who uses an attractive, though concealed technique for educating this invaluable sense which all first-graders should develop. When mid-morning lunch is over, her children stretch out on their rugs for a short rest, shades down. With a twinkle in her eye the teacher now opens a notebook and reads from its pages a verbatim report of what the children have said and done in their early cooperative planning of an activity project (such as the trip to the dairy). Recumbent and relaxed on their rugs the children smile as they listen, chuckling at their own remarks. The teacher, who should be a dramatist of sorts, is holding up a mirror in which the children see themselves. This is education in humor and tolerance. It is mental hygiene; it is developmental guidance. In such a genial atmosphere, personality thrives; the mind gains in pliancy and in stamina.

These inward processes of assimilation and reconstruction rise to higher levels as the child matures. We shall see some interesting growth transformations in the seventh year. But the transitional sixth year must come first.

MATURITY TRAITS

(The following maturity traits are not to be regarded as rigid norms nor as models. They simply illustrate the kinds of behavior (desirable or otherwise) which tend to occur at this age. Every child has an individual pattern of growth, unique to him. The behavior traits here outlined may be used to interpret his individuality and to consider the maturity level at which he is functioning.)

§1. MOTOR CHARACTERISTICS

Bodily Activity

The composure of FIVE is no longer characteristic of FIVE-AND-A-HALF, who is said to be restless at home. He plays

indoors or outdoors and does not seem to know which place he wants to be. He occupies himself with digging, dancing and climbing. He rides his tricycle downhill. He carts things about in a wagon. Sand, water and mud play keep him oc-

* We made her acquaintance in one of the useful leaflets of a *Portfolio for Primary Teachers* issued by the Association for Childhood Education (A Good Day at School for the Sixes by Elizabeth Vernon Hubbard), Washington, D.C.

cupied. Household tasks provide him many motor activities. He likes to set the table and help his mother by getting things for her. When asked what he plays he says, "Just one thing after another."

Six is an active age. The child is in almost constant activity whether standing or sitting. He seems to be consciously balancing his own body in space. He is everywhere,—climbing trees, crawling over, under and about his large block structures or other children. He seems to be all legs and arms as he dances about the room.

He approaches activities both with more abandon and more deliberation and he may stumble and fall in his efforts to master. He may like the "cleaning up" job at school, brushing the floor, pushing furniture about albeit he is somewhat clumsy and not too thorough. He enjoys activity and does not like interference.

There is a good deal of boisterous, ramble-scramble play. He likes to wrestle with his father or a sibling, but this may end in disaster for he does not know when to stop. Indoors his ball play may become a menace as he bounces, tosses and tries to catch. He is also interested in stunts on a trapeze bar; he likes to pull himself up on a rope, and swing. Swings are favorites; he sits with more freedom and balance and he loves to swing as high as he can.

Six over-extends in much of his motor behavior. He likes to build blocks higher than his shoulder; he tries to do a running broad jump without minding if he falls. His own yard may not be as attractive as a neighbor's.

Eyes and Hands

There are also noticeable changes in the eye-hand behavior of the 5½-year-old.

He seems more aware of his hand as a tool and he experiments with it as such. He is reported to be awkward in performing fine motor tasks, yet he has a new demand for such activities. Tinker toys and tools are especially interesting to him. He may be less interested in what he accomplishes with the tools and more in manipulating them. He likes to take things apart as well as put them together. Girls especially like to dress and undress dolls at this age.

He now holds his pencil more awkwardly and he changes his grasp on it. He likes to draw, print and color as he did at five but he adheres less closely to a model. Filling in with color may occupy him for a considerable period. In coloring, he is awkward, shifts his body position as well as his prehension of the crayon and tilts his head. He may stand and lean way over the table and continue to draw or he may rest his head down on his arm. He may say that his hand "gets tired" and bring the free hand to it briefly. With his attempts at finer manipulation he is often found standing or even walking as he is working.

Six is as active in sitting as he is in the standing position. He wriggles on a chair, sits on the edge, may even fall off. There is a good deal of oral activity: tongue extension and mouthing, blowing through and biting lips. He bites, chews or taps his pencil. Pencil grasp is less awkward than at 5½ years, but his performance is laborious.

Eye and hand now function with less of the speed and close relationship that they showed at five. In building a tower of small blocks, Six makes a more deliberate regardful approach and tries to place the blocks accurately. But they may not be as accurately aligned as they were at five. At another time, Six may build

with such careless abandon that the blocks fall repeatedly.

He touches, handles and explores all materials. "What do you do with this?" He wants to do everything. There is often more activity than actual accomplishment. But he cuts and pastes, making books and boxes, and moulds clay into objects.

Six can shift his eyes more facilely and he shifts his regard frequently from the task at hand. He is easily distracted by the environment and his hands may continue to work as he watches another's activity.

In carpentry he needs a good deal of assistance. The saw bends and gets jammed. He pounds and pounds in driving nails. He often fails to hit them on the head and may even break the board. He may hold the hammer near the head. He can, however, make crude structures.

§2. PERSONAL HYGIENE

Eating

Appetite. The good appetite of Five continues into six and may become tremendous. Some children are said to eat all day long, and are reputed to eat better between meals than at meals. Breakfast continues to be the poorest meal and may be accompanied by stomach ache, nausea and infrequently by vomiting. A liquid diet of milk and fruit juice is definitely preferred.

In contrast to his poor morning meal, the 6-year-old often feels hungry just before he goes to bed and may eat a sizable snack with real enjoyment. He may even awaken in the middle of the night and ask for food.

Six's eyes are often bigger than his stomach, and he is apt to ask for bigger helpings than he can handle. He should not be held too closely to his initial re-

quest. If he does not agree to have two helpings with the chance of refusing his planned second helping, he may be allowed to divide the food on his plate into two portions. Face-saving devices for both parent and child should be made quickly available as they are needed. Such devices gather legitimacy and meaning when one realizes that the 6-year-old is characteristically good at starting things and definitely poor at finishing.

A boost in appetite is often accomplished by some new experience, some change in routine. Thus a visit to grandmother's, or a meal at a restaurant with the family often brings about an improvement, even though it may be only temporary.

Refusals and Preferences. Six continues to prefer plain cooking. Though he may have a fairly wide range of food likes and is willing to try new foods, his likes and dislikes are usually very positive. He may refuse meat because he once was served a piece with a little rim of fat on it, or he may refuse meat because he doesn't like to chew. He may refuse foods by spells. What's "in" is strongly in and what's "out" is completely out. This is the age when peanut butter begins its rise toward its 7-8-year-old pinnacle of preference. Many of the cooked desserts, especially rice pudding and custard, are perhaps refused for themselves alone, but often the 6-year-old goes "off desserts." If they came at the beginning of the meal he might perhaps eat them with relish. He usually prefers raw vegetables to cooked ones. Textures are extremely important: lumpy, stringy foods are commonly refused.

Self-Help. Many children return to finger feeding at six. Eating implements seem

to be an unnecessary intrusion between them and the food, and they are manipulated awkwardly. Even such foods as mashed potatoes are finger fed. These children should be given more whole foods so that they may finger feed themselves. The fork is often preferred to a spoon and will be used if the food can be speared. At the opposite extreme are the fastidious children who would not think of touching their food with their fingers or of spilling a drop. These children eat with care and precision and use implements deftly.

Table Behavior. It is not an edifying experience to have a 6-year-old at the table, especially at the evening meal. He really does not belong there, and would much prefer to have a tray beside the radio while he is either listening to music or to his special program.

His motor control is very erratic in sitting as well as in standing. The minute he sits down his legs are likely to start swinging. If your leg or the table leg is within range, the force of his thrust will be duly imprinted. If he must come to the table he might be allowed to come in his stocking feet. After his initial attack upon his food he begins to dawdle and to wriggle. He reaches for a carrot and knocks over his milk. His arms jerk and he spills his food. Pretty soon he is teetering on the back legs of his chair or even on only one leg. Father is slowly losing patience and has perhaps already said too much in his attempt to hold the child in line.

When the 6-year-old does eat he stuffs his mouth too full and is apt to talk with his mouth full. If his total body is not active, he is at least likely to talk too much. If he is criticized for his behavior he is apt to find the same flaws for which

he is criticized in his siblings or parents.

Leaving him alone at the table produces almost the opposite effect to the desired one. He dawdles a little more than he did. Taking the food away from him either makes him angry or produces tears. The return of the food may tip the scale in the right direction, but the best stimulus, if he is at the family table, may be to race with him, making sure that he will win.

Needless to say, not all 6-year-olds are composites of this picture, but most of them show at least some of its features. A few children actually eat better with the family group than alone, but a surprisingly large number actually request supper in bed, or a tray by the radio. They seem to sense what is best for them; for when allowed to come to the table on occasion, they handle the situation much better, showing pride in accomplishment. It is unfortunate to send a child from the table as a punishment for failure. If he insists on being with the family group regularly, he is usually quite satisfied to sit at his own little table, preferably with another sibling.

A napkin is still a cultural tool beyond his competence. The child now refuses a bib and may also refuse to have the napkin tucked in under his chin. If the napkin is beside his plate he forgets to use it and if it is on his lap it quickly falls to the floor. He may be aware of food around his mouth and may deftly remove it by a sweep of the back of his hand. Others use a napkin on being reminded, but on the whole clean hands and clean faces are still the responsibility of the adult and not of the child.

Sleep

Nap. A very few 5½-year-old children cling to a half hour nap on occasion. By

six, if there still is any desire to nap it is cut into by afternoon school attendance. The rich enjoyment which a 6-year-old expresses when he takes an hour's planned "play nap" may well make us question the advisability of school attendance at that time.

Bedtime. The 5½-year-old in his pre-sleep patterns shows a very real developmental shift in his behavior. He is definitely tired and rarely resists going to bed at his usual bedtime (7-8 P.M.) or even earlier. Some children like to get ready for bed before supper and to have a tray in bed, though they do not actually go to bed to sleep before their usual bedtime. They are more fearful at this age, want the companionship of their mother even after the lights are turned off; may ask to have an adult remain on the same floor with them, to sleep in the same room with a sibling or to have the hall light on. There is a return of interest in and of taking stuffed animals and dolls to bed with them, even to the number of two or three. They treat these toys as though they were real people keeping them company. Prayers have an unusually quieting effect upon some children and should be seriously considered especially with the fearful child.

The 6-year-old's bedtime behavior is not as fearful as that of the 5½-year-old. He goes to bed quite easily and enjoys some quiet activity or music after he is in bed. He especially likes to be read to or to look at books for half an hour. This is an excellent time to stimulate a child's interest in reading. He enjoys picking out single letters, especially capital letters, or even words in the story his parent is reading to him. After the lights are turned out he is fond of telling about the day's happenings and about things that are on

his mind. He is very spontaneous at this age: all the mother needs to do is to listen, guiding his thoughts along the channel he is taking.

Some children enjoy having father put them to bed, and respond more smoothly to him. Others, however, are overstimulated by the father. Some girls do not go to sleep until their father has kissed them goodnight. As a rule the mother is still preferred especially for the good-night chats.

Night. There is an increasing number of 6-year-olds who are said to be "wonderful sleepers." But there are still quite a few, though fewer than at five, whose sleep is disturbed by toilet needs or by "bad dreams." Strange men and women are beginning to appear in their dreams, and the dream animals which are still frequently present are becoming active, especially in biting.

When a terrifying nightmare occurs, the child may be unable to quiet until his mother gets into bed with him. Those who are able to awaken by themselves, crawl into bed with their parents, especially with their mother. Some return to their own beds after telling the dream; others after a short reassuring snuggle with their mother. Still others need to spend the rest of the night in their mother's bed, even though she may have slipped out and gone to sleep in the child's bed.

Very few children are toiletied routinely at this age. Some of those who still need to get up must report to their parent after they have functioned, but an increasing number care for themselves and get back into bed by themselves.

Morning. Morning waking at 5½ years of age shows two extremes: the early wakers

(5:30-6:00 A.M.), and the late wakers (8 A.M.). The latter may even have to be awakened. By six the extremes are not quite so wide. The usual waking time is between 7 and 7:30, and the child no longer needs to be wakened. The 5½-year-old sleeps about 11½ hours; the 6-year-old 11 hours.

On rising, the 6-year-old toilets himself and usually becomes more interested in his morning play activities than in his dressing. If, however, his clothes are laid out singly on the bed for him he may carry through after a reminder to begin.

Elimination

Bowel. The general pattern of the 5-year-old persists—one movement per day, after lunch. There is a tendency to shift this function to the earlier half of the day rather than the latter half. A few shift to before breakfast or after bedtime. Two movements per day may occur but these are often two installments of one movement, since the child may not sit long enough to complete the evacuation. The parent needs to help with a little supervision to see that the child remains long enough to finish.

As a rule, functioning is rather rapid, in fact if the child has waited until the latter part of the afternoon, it may be so rapid that he makes a mad dash for the bathroom and may arrive there too late. With some children the movement seems to occur almost involuntarily before they can do anything about it. These episodes of incontinence affect the parents almost more than the child. The child may be ashamed and may crawl off into some recess, though frequently he tries to set things right by changing his pants and cleaning himself up. And the parent also is ashamed, and would never think of mentioning it to the family physician.

Ability to function easily on the school toilet usually does not come until about the age of 8 years. The 6-year-old therefore often comes to grief while loitering on his way home from the afternoon session unless a parent meets him to expedite his return home, or forestalls the episode at the noon hour. Spanking and undue "shaming" are poor measures of control.

Most children take care of their own needs without reporting before or after they have functioned. Some are more aware of the function and report, as they did earlier, on the size, shape and number of the movements; or they do the opposite and withdraw themselves completely by locking the bathroom door.

Swearing and name calling are definitely related to the bowel function at this age. "Stinker" is a term in common use and may well stem from a realistic experience. Also a 5½ to 6-year-old is apt to shout in anger to another child, "You go pooh in your pants!"

Bladder. Day or night wetting is now rare. As at five, a child may delay too long and have to make a mad dash. Frequently such episodes can be averted by reminding the child to go to the bathroom at a favorable time, e.g. before he goes out to play or before he goes on a trip. A few children suddenly wet or dampen their pants just as others suddenly have an impulsive bowel movement. They feel badly and often say, "I don't know when I do it." These lapses might be controlled by a little more planned reminding.

Night wetting is uncommon but may recur with a cold or if the sleeping temperature of the child is too warm or too cold. A fair number still need to get up for toileting, usually taking care of their

own needs and going back to bed without report to their parent.

The urinary function, especially the sound of this function, may stimulate giggling and teasing between two children at this age. One child in the bathroom at a time is a simple rule and one which is easily adhered to. Peripheral and preventive control thus takes the place of direct control. In the male 6-year-old the urinary function may be used verbally in a humorous or an angry attack. He may say, "I'll pee in your eye!"

Bath and Dressing

Bath. The nightly bath is now being resisted by some children, especially boys. The child may say he is too tired to bathe, which is true in part, for he might have bathed without resistance at 5 o'clock with the plan to have supper in bed. A bath every other night may be accepted fairly readily. Some children still show no interest in washing themselves. Some try to bathe themselves completely. Others limit their efforts to legs and feet. Nearly all need help in drawing the water and with regard to finishing touches in the head and neck regions.

Often a bath goes more smoothly with father than with mother. Dawdling in the tub is the rule and it is hard to get the child out of the tub. He can be hastened by simple techniques such as pacing, counting or planning an interesting bed-time activity.

Most children of this age wash hands and face reasonably well but not spontaneously, and with some "the face is just the nose." Although beginning to be aware of dirt on another person, many SIXES are not too much concerned about dirt on themselves and they may resist washing themselves, though they will accept help. More casualness about washing

up would help a good deal to make home life smoother. A mother's self-rebuke (*after a meal*) "Oh I forgot to remind you to wash your hands!" gives the child a wonderful lift—the legitimate kind of lift one gets from knowing that others also err.

Dressing and Care of Clothes. Wanting to dress is half the battle, but many 6-year-olds have not as yet acquired this desire. That is why SIX still needs to be handled in part like a 5-year-old. Though he often will not allow his mother actually to assist him, her mere presence seems to help. It is a good time for spelling or arithmetic games or the "I see something" games. He also loves to race with a parent. If he ties his shoelaces he does it too loosely. A child may need less help on the more leisurely mornings when he does not attend school. Undressing is accomplished with considerable speed.

SIX is a clothes conscious age. Boys are interested in and proud of their knickers and ties; and girls desire pretty dresses with accessory adornment and socks to match, and often refuse to wear overalls and winter leggings. Specific styles and colors, often red, are demanded, and boys begin to talk about high boots. Six-year-olds often need help with their leggings and also with the second sleeve of the coat. Because of SIX's dressing difficulties, parents may well question the wisdom of requiring a change to play clothes after school. Why not have some in-between clothes that are both good enough for school and yet not too good for play?

Although SIX is interested in his clothes, he does not take very good care of them. As one mother expressed it, "She likes to have things right, but she doesn't do anything about it." At five-and-a-half, when the child peeled off his

clothes he often threw them to (or at) his mother. At six he flings them all about the room, often in a humorous way or to test how many places and directions he can throw. This can easily be turned into a useful game of collecting his clothes, which both mother and child enjoy, or by saving a corner into which dirty clothes may be thrown. It is more fun to throw clothes into a corner than into a hamper. "Shoe trouble" is a very real trouble at six. The 6-year-old male especially wants to take off his shoes when he is in the house, but he is apt to leave one in one room and the other in another, and all too frequently the entire household is set on a hunt the next morning so that he can go to school with his shoes on. His parents actually prefer to have him take his shoes off at the table because he kicks. There are multiple grounds for preventive strategy. Why not do as the Dutch do, have the 6- and 7-year-old take off his shoes as he enters the house, and let him go around in his stocking feet?

Some boys are becoming interested in combing their hair. Girls may rue the day that they asked for braids, but they do not want to give them up in spite of all the discomfort that combing causes. The scalp is very sensitive at about this age, but the painfulness of the combing can be much reduced if the child may occupy herself with a book, or coloring, or piano, during the process.

Health and Somatic Complaints

It is not only the general behavior of the 6-year-old which goes awry, but the working of his physical bodily structure as well. The 5½ to 6-year-old is full of "complaints"—legitimate complaints which should be seriously listened to. At five-and-a-half his feet "hurt" him. He may walk as though he were lame. By

six, his legs hurt him, occasionally his arms, and frequently the back of his neck. He says he has a "krick" in his neck. Rubbing and massage bring both comfort and alleviation of pain.

He complains of being hot, so hot that he would like to go outside without any clothes on. He perspires readily. Actually his mucous membranes seem to inflame easily. The mucous membranes of his eyes may become reddened and he may develop styes. His throat not only "hurts," but it becomes red and infected, and the infection frequently spreads to his ears and his lungs. Otitis media again reaches a peak, similar to the 2½-year-old peak. In addition to the more common communicable diseases as at five—chickenpox, measles and whooping cough,—German measles and mumps show an increase. Diphtheria and scarlet fever reach a peak similar to the pre-adolescent peak.

Allergy responses are high. These may be in the form of a return of past allergic responses or a new development of hay fever. The mucous membrane of the nose is sensitive and congests readily. A number of girls complain that their urine burns, and they obviously have reddened genitalia which need intermittent care with bland salve application. The skin may be very sensitive in the head and neck regions. Hair combing is a painful process for some girls at this age. Boys may react with half-painful convulsive laughter when washed by an adult, because of hypersensitive face and neck. If the child washes himself he is far less sensitive. Boils may develop on face, neck or arms.

The child of this age tires easily, in fact he wilts. Yet he may hate to give in by resting. Rather free use of the bed will prevent undue fatigue and even illnesses. The bed should be psychologized in the

child's mind as a pleasant haven of rest and of relaxing activity.

Six does not make transitions easily. The immediate future often looms up as something to be almost too much to cope with. He may not want to get up on school days. He may say, "I don't feel well," but makes a dramatic recovery as soon as the school bus has passed his house. Or when he is at breakfast he may complain of a stomach ache, and even vomit. Significantly enough these symptoms do not occur over the week-end. A little help, by not requiring him to eat too much at breakfast, and the added interest of having an older and admired child call especially for him or her, may well control these symptoms. A stomach ache may still as at five years of age be related to an imminent bowel movement.

The clumsy headlongedness of Six makes him susceptible to falls. He is fairly safe in trees, but is not too well balanced on fences which he insists upon climbing. He is apt to break a fall with his arm, and thereby is liable to break his arm as he falls.

This is the age when the word "sissy" looms up as a possible reality in the minds of many fathers, in regard to their sons. The sight of blood may be upsetting to the 6-year-old and the removal of a splinter by his mother may bring an hysterical reaction. Fathers should not too readily construe this as "sissy" behavior, and should realize that it is part of the child's emotional bond with his mother. If the parent feels that the splinter must be removed at once the child may gather control by being allowed to pinch his mother as much as it hurts. But why does the splinter need to be removed at once? Sticking on a sanitary adhesive insures an oozing and healing

around the splinter which often comes out with the adhesive tape as it loosens in the bath. A child is more likely to report his scratches, slivers and blisters if he can tolerate the treatment. Serious infections usually are the result of delayed reporting and absence of care.

Tensional Outlets

Tensional manifestations rise to a peak at five-and-a-half to six years of age. They include outbursts of screaming, violent temper-tantrums and striking at the parent. The child may so completely lose control that the mother needs to intervene and take him bodily to his room, leaving him there for a brief period and then returning to help him get over his difficulty. Left alone he might go on indefinitely to a point of exhaustion. Skillful distraction helps.

Later, after the storm has passed, the mother analyzes what brought on the outburst, and how she might have avoided it. She may be able to discuss this with the child when he is in a receptive mood. By six years of age he may be snapped out of his outbursts with a humorous twist not related to himself and may shift his crying and screaming into laughter, but before this age the use of humor may well make matters worse.

The mother needs to realize that at this temporary maturity stage the child wants his way just for the sake of having his way, and that he will be more open to suggestion by six or six-and-a-half years of age. She must also realize that the child again needs to be protected from himself, just as he did at two-and-a-half years of age. Free access to candy may have to be stopped for a time, and drawers and closets may again need to be locked. A rigid schedule may have to be set up, stating how many pieces of candy

are allowed, and the conditions under which they are allowed.

Besides violent outlets, there is also a diffusion of tensional energy into diverse channels,—leg swinging and wriggling, biting or tearing off fingernails and toenails, scratching, grimacing, grinding teeth, chewing on ties, sash ends and pigtails or pencils; picking nose and even eating nasal incrustations. These various behaviors are likely to occur when something is demanded of the child, or by the child of himself, which is not yet within his competence, or when he is waiting for something to happen, or even when he is trying to go to sleep. If pronounced, the tensional behavior may indicate that the child's task should be lightened. The disgusting aspect of nose picking can at least be alleviated by seeing that the child thoroughly cleans his nose before he starts out for school.

At night he might not fight sleep so much if he were read to or were allowed to listen to music, or to have a chat with his mother after lights are out. He may want to talk about things that are on his mind,—things that he cannot think through without his mother's help. He likes to hear about God, and to look up verses in the Bible. And finally he lets his mother go after prayers are said and he has had a long goodnight kiss.

In some children the tensional outlets are less marked,—a sigh, bringing fingers to mouth, hair to mouth or hands to hair. With some the tensional escape is verbal or expletive,—“hell,” “damn,” “ugh,” “hum,” “high hell” or “stink.” Yet others manifest repetitive muscular releases, tic-like in nature: blinking, throat clearing, twitching of one side of the face, or head shaking. If such reactions occur mainly at dinner when father is at home, the child should probably have his meal on a tray

in his room. This does not imply that the father is the specific cause of these reactions. It may simply mean that the child is so immature that for the time being two is company but three is a crowd.

In a few children, especially boys, who stutter, there is a marked exacerbation at six, with a genuine difficulty in getting started to talk. By six to six-and-a-half these same children are aware that they stutter. As one boy expressed it, “No use fooling me, I know I stutter.” The best handling is alleviation. Knowing how to act and what to say in new social situations reduces sensitiveness and a tendency to withdrawal.

§3. EMOTIONAL EXPRESSION

During the period from about five-and-a-half to six years, the child is in a more or less constant state of emotional tension and even ferment. His emotional reactions reflect both the state of his organism and its sensitiveness to his environment. His emotional expressions may be likened to the magnetic needle of a compass which reports an exact position. The parent needs to realize that a child of this age is very accurate in expressing the exact position and direction of the course which he is taking. It is very difficult to alter this course by external pressure. For that reason, preventive handling, or a constructive giving in, are often the only two ways of dealing effectively with the child. Fortunately by six and even more by six-and-a-half, his behavior begins to lose its rigidity. It becomes more susceptible to shifts in direction both inwardly motivated and outwardly stimulated.

Although the emotional trends of the 5½ to 6-year-old may be considered as rigid and as going in one direction, he can veer to the opposite direction and

become rigid in that direction. That is why he is so often described as "sunshine and shadow," "either-or," "utterly sweet or utterly horrid." He "adores his dog but is cruel to him"; he "adores his baby sister but threatens to kill her." He may meet a new experience with shyness and then with sheer abandon. He may refuse to answer a question for lack of knowledge and yet he declares, "I know about everything." Reportedly he is "wonderful" at school and "terrible" at home, or vice versa.

Many of the difficulties of the 5½-year-old arise out of an inability to shift and to modulate his behavior. He is not so much persistent as unable to stop; so he cries continuously once he has begun. He stays with things so long that he becomes fatigued and often cannot leave them of his own accord without an emotional explosion. Children who are poor fine motor performers and who are more interested in people and in gross motor activities readily become moody, bored and restless with indoor confinement. They wander around and do not know what to do. Dawdling, which reaches a peak at this age—may be regarded as a persistence of aimlessness. When the child tries to make a difficult choice he "gets all mixed up," but finally if he does make up his mind he becomes adamant. He is completely unable to consider a compromise and neither bribes nor punishments produce their usual results. Nevertheless he does have good days as well as bad days. It is important to build up behavior on these good days when he is responsive.

The child of five-and-a-half to six years responds to impersonal handling, such as the counting technique to which he can be trained to react automatically. Also such smooth-the-way phrases as "a good

thing to do," or "first do it your own way, then do it mine" may forestall the child's usual resistance. He takes criticism badly, but he thrives on praise and approval. He likes to do things on a game basis. One child expressed this mode of cooperation nicely when she said, "My mother isn't angry; we're doing things together!"

On the bad days the parent may wisely let things go, and figuratively "hit for the woods." You do not demand much from the child on these days and you utilize as much as possible the automatic releases which have taken hold on the good days.

If emotional explosions do come they come very rapidly. They come in different ways. Some children merely cry; some attack both verbally and with their hands and feet; some have an all-over temper tantrum as though their bodies were firing from all points. The children who "burst into tears" are perhaps the most sensitive. They cry because things are not going right, because their feelings are hurt, because their mother spoke sharply to them, to a maid or to one of their siblings. The children who strike out physically or verbally are more excitable and impetuous in disposition: they feel that their course of action is suddenly impeded. Their verbal missiles of attack are short and terse: "I won't," "I'll scream," "I'll hit you," "Get out of here," "Keep quiet," "I'll shoot you," "I'll get my gun." Such verbal defiance at least inhibits a physical attack.

In a temper-tantrum type of response the lower centers seem to take over completely. Parents say, "He gets so mad he's almost insane," or "He becomes positively furious!" In these rages the child may throw a vase or rip a hole in a cane seat. The swing back to equilibrium is achieved

differently by different children. Some can respond to help from the parent especially if the outburst has occurred because of a misapprehension or lack of information. The majority finally respond to distraction, but a few seem to have to continue until their energy has been spent.

When a child feels sorry after a violent episode and attempts to make amends, he may well be moving away from outbursts to a higher organization, but the surest means of promoting his organization is for the parent to handle the child preventively. In all of these outbursts it is usually the little things of life that light the fuse. The child got a word wrong at school, the mother couldn't tie the child's shoe laces the minute he asked, or he stubbed his toe. The big things of life, real demands, are handled with relative ease. There is a marked decrease of these explosions by six, and still more by six-and-a-half years of age. The child is then more receptive to teaching and can at least ask for help.

The fresh, rude, "ready for a fight" attitude in the 6-year-old's voice and bearing is unduly distasteful to many parents. This attitude actually denotes a step forward, in the sense that the organism is now trying to act on its own even though it may be by defiance. The child gets a new leverage by pulling away from the parent. With hands on hips and that saucy look on her face, a 6-year-old girl defies her mother with an "I won't." Or maybe while seated at the table, she crosses her arms and looks haughtily at her mother without speaking,—but fortunately gives a clue by glancing down to the side of her plate where the mother forgot to place a spoon.

When asked a question, Six may reply, "Why do you want to know?", or when given a reason he voices his repeated

phrase, "So what!" He domineers and he argues; especially does he argue when he undertakes to show his mother where she was wrong. He may become very noisy, boisterous and easily excitable. On such occasions he may quiet if you read to him or have him listen to records.

Girls especially are full of buffoonery; they giggle and grimace, and act silly, often with the intent to make others laugh. They would go on endlessly unless diverted to some new interest. When company comes, both sexes are most ir-repressible. They want to be the life of the party. They monopolize the conversation, do gymnastics, act foolish, kick up their heels, laugh and interrupt without seeming to be aware that anyone else is talking. It might be better if they were given some attention and allowed to do their tricks with an audience response. Then they could be more readily transferred from the scene. Perhaps the mother has planned in advance on something for them to do or some place for them to go, or maybe one of the guests will join the child in his room to see his things and to play with him.

The excitement of a party is frequently too much for Six and he either crawls off into a corner, withdraws from the scene or becomes unrestrained in actions or talk. He may say wildly, "I'm going to eat the radiator," or "I'm going to eat the bathroom." An ideal party at six might consist of an exchange of presents,—the guests to receive as well as to bestow gifts,—with a reciprocal arrangement, or barter feast of ice cream and cake.

The 6-year-old's initial response to any personal demand made upon him is usually "No," but given time and a few detours he will come around to the idea almost as though it were his own. He may freeze into immobility if asked to

"hurry up." Sometimes he is willing,—especially if asked in the proper tone of voice—but he does not carry through. Then he needs to be given three or possibly four chances. If this fails one can often get him started by counting,—a device which usually works like magic. He resents authority that is arbitrarily imposed. He also resents punishment or being reprimanded before company, and rightly so. If he rebels, as he may, about school, it would be wise to look into possible causes. Maybe he has had one unfortunate experience which he cannot get off his mind, but which could easily be made right.

Praise is an elixir to Six, but correction is poison. However he can accept a correction if it is postponed long enough after the occurrence of the event. With some children the necessary postponement is only a few hours or less. In some households such discussions become related to a specific time of day as after lunch, at rest time or at bedtime. But with a few children, several days must elapse before discussion can take place. Too many events in the life of the child are left dangling and unresolved at this age. One parent reports that she kept a dated record of disturbing events, using the notebook to help the child to recall and finally to resolve his difficulties. This method of handling is comparable to storing away for future reference the squeaky toys which the infant once feared. Finally when he is ready, the toys are brought out again. It is wonderful for him to discover that now he can handle and enjoy these very toys.

The shift in emotions from five-and-a-half to six-and-a-half is almost as though the child were passing through an emotional spectrum from dark to light. The new sense of self which is emerging at

five-and-a-half years is working pretty much in the dark. Gradually with further organization there is a real shift from the more negative emotions into a positive zone. By six, the child is becoming more happy. He laughs and squeals. He has a "twinkle in his eye" when about to tell a story; a "glow of satisfaction" after he has talked on the telephone. He seems to feel the beauty of a sunset, the grandeur of clouds, and the mysteriousness of insect sounds in the summer twilight. He is said to be angelic at times, to be more generous, to be companionable and sympathetic. Although he may have strong likes and dislikes, his preferences may show real taste.

But these new positive emotional forces are still under crude control. He trembles with excitement. He boasts that he is the best. He praises himself as he says, "I did an awfully good picture at school." He is inquisitive to the point of destructiveness. And most of all he shows pride in his acts, his accomplishments, his clothes, his family possessions and his siblings. But he may also be most jealous of the very sibling of whom he is most proud.

By the age of six-and-a-half years, joy begins to figure more strongly in his emotional life. Parents report a new kind of enthusiasm: he "loves" to do things. He "enjoys books," he "enjoys the effort of working on a thing," and most of all "he enjoys surprising his parents." Despite these positive and pleasant trends, there are recurring and less happy episodes, reminiscent of the 5½ to 6-year-old stage of immaturity. However, the overall trend toward equilibrium is so strong that after an episode, the child can plan and resolve to be "good" the rest of the day! There are also precursor signs of SEVEN, when the child looks too far within himself and begins to worry.

§4. FEARS AND DREAMS

Fears

The terrific newness and incompleteness of behavior patterns at five-and-a-half to six years of age show their reality in a marked increase of fear responses. Some of the pre-school fears such as fear of dogs may show a temporary rise, but the child may now confine his fear to *big* dogs. He may be able to touch little dogs and may be thinking ahead to the time when he can have a dog of his own. Wild animals may still be a fearful reality. The upstairs becomes inhabited with lions and tigers, but oddly enough these creatures do not invade his mother's room. That is why the 5½-year-old may go to sleep so quickly in his mother's bed. But ridding his own room and closet of wild animals by the dramatic wielding of sticks, especially by his father, makes his room safe again. Wild animals, especially bears, also inhabit woods, and the forest is accordingly to be feared. Tiny insects also are to be feared both because of their noises and their bite or sting. The reading at school of a story like Foxy-Loxy who eats you up, or a story about bees which sting, may be the true source of a child's refusal to return to school.

The elements such as thunder, rain, wind and especially fire are all fearful in their separate ways, but especially because of the sounds they make. Man-made sounds like sirens, static, telephones, noise of flushing the toilet, angry voices on the radio, all may induce fear until they are localized and identified. The child may provide his own protection by putting his hands over his ears. Helping some other person to control a fear is the surest means of resolving a fear. Even a kitten may be protected from a possible fear of thunder by a child's comforting words,

"Don't be afraid, that's only thunder."
The act of comforting helps the child as well as the kitten.

The imaginative sub-human black witches and ghosts that come through a wall are also feared by the 6-year-old. He compulsively grapples with these creatures in dramatizing play with witches and ghosts in the dark, but by the fearful tones in his voice as he plays one knows that he has not yet conquered his dread. A few 6-year-olds especially if over doctrinated, are afraid of God, and think that God is watching everything that they are doing.

Human beings also are feared. The man under the bed, the man in the woods, takes on characteristics human and sub-human. There is a comparable fear of deformities. A broken leg in a cast or a spastic child fearsomely offends the 6-year-old's idea of the human normal. Some 6-year-olds, and these are readily picked out and tantalized by the very children they fear, are afraid that other children will attack them. The fear that something might happen to the mother, which began at five, persists into six, and now includes the fear that she may die.

A fear which is difficult to understand and one which often makes the child "go all to pieces" is his fear of even a slight injury to his body. A sliver, a scratch, the prick of a hypodermic, the sight of blood—all may produce a response out of all proportion to the cause. The child's control comes later when he is able to take care of his own minor injuries.

With the undoubted reorientation that the 5½ to 6-year-old child is experiencing in space, he becomes more aware of upper and nether regions. Boys particularly are frequently afraid of the cellar and occasionally of the attic. Dark is to be feared because it moves in space, and destroys all

spatial relationships. The lighting of a candle in a blackout is something to be cherished because it brings back spatial relationships even though it may also produce shadows that possess a frightening form. The presence of another human being or animal is especially needed at the 5½-year-old stage when cellars and attics or being alone on the second floor are fears to be conquered. The presence of light may be enough to allay the fear, but by no means always before age six. A flashlight under the pillow, a night light in the room which produces a diffuse non-shadowy light, a light in the hall, all help to dispel these fears which are so much a part of the child's incompleteness, and a relatively normal expression of his immaturity.

There are "time fears" as well as "space fears." The fear of being late for school may appear in a few children who have over-responded to an experience of being late. A fear arising from some single experience is rather common at six, but it would not occur were the child not susceptible to that specific stimulus. The primary occasion is often unknown, because there may be a delay even of two or three months before the child expresses his fear either in words or in a dream. That is why it is well for a parent to be informed about his child's experiences both at home and at school.

It is imperative for the parent of the 6-year-old to understand the mechanism of fears. In general, fears may be thought of as "coming in" when a child becomes aware of something which he cannot comprehend or handle. His first response is one of withdrawal. This withdrawal stage may last for a split second or may persist for months. This is the child's method of protection, of waiting until he is better organized to handle the situation from

which he has withdrawn. Later, when he is more ready to handle the situation he will go through a period when he approaches the situation compulsively.

All too frequently experiences come to the child prematurely. An alert, knowing, understanding environment would protect him from experiences until he was relatively ready to handle them. This does not mean that he should live an isolated sterile life. But it does mean that a 6-year-old should not see movies with airplanes crashing, that he should not be read stories about children being eaten up by bears or princesses turning to stone, that a little girl should not be left loose to pick up with a strange man. And a little boy should not have paragraph reading crammed into his brain when he has only a two-letter span.

Such protection does not preclude the fact that at a later age the child may seek the very experiences from which he now withdraws. At eight, he cannot get enough of extreme action and gore. Thereby he will resolve his former withdrawal,—by compulsive approach into the very areas from which he has earlier withdrawn. The length of a compulsion stage may well match the length of the preceding withdrawal stage. Therefore the environment should shorten the withdrawal stage if it can by a better timing of the initial experience. Sometimes the child becomes so fixed in a withdrawal stage, if the experience has been extremely premature, that the environment must actively assist in the resolution. The child cannot handle it by himself. According to the situation or the individual personality involved, the environment must either build up positive responses by minute stages, or thrust the child into a compulsive approach stage which when satisfied may lead to resolution.

Dreams

The dreams of Six, like his waking behavior, tend toward opposite extremes: funny or ghastly, nice or bad, a jolly clown or an angry lion. Wild animals such as foxes, bears, tigers or snakes are not only in his bed but they bite him, and also chase him. Nevertheless there are usually fewer wild animal dreams than at five. Domestic animals such as the dog, cat and horse are now beginning to inhabit the child's dreams. The dog may chase him,—but these domestic animals are far less frightening and usually enter into his "nice" dreams.

The commonest element dreamed about is fire. Six dreams that a house, or more specifically his own house, is on fire. He may also dream of thunder and lightning, or of war.

The near-human figured in ghosts and skeletons brings dream-fright to the child, but dream angels also sing to soothe him. Girls especially dream about bad men who appear at their windows, or who threaten to get into their rooms, or who may actually be in their rooms hidden under a piece of furniture.

Human beings are now taking more of a place in the child's dreams. He dreams of his mother, his siblings, his playmates, of himself in relation to other people. Girls may dream that their mother has been injured or killed. Six may dream that he has been abandoned by his parents, and is alone in the house with his dog. But when he dreams of his playmates, he dreams of happier things, of tea parties, and play at the seashore.

Six frequently laughs in his sleep or talks out loud. He calls his mother, siblings, and playmates by name and is apt to give orders in his sleep: "Don't do that," or "Put it down."

Nightmares are less common than they were at five, although some children, especially boys, continue to have nightmares without being able to tell what they are about. If Six awakens, he is usually able to go to his mother's bed to seek comfort.

Within a series of dreams, some children hold on to a standard pattern, others show change from one dream to the next. Resolution is more quickly achieved when the dreams show a shift in pattern. Six may dream that the house down the street is on fire, then that the house in the middle of the block is on fire, and finally that his own house is on fire. Another Six may dream that her mother was killed, then that both she and her mother were killed, and finally that she alone was killed. Though it is difficult to find out what many nightmares are about, they probably have a stereotyped repetitiveness of pattern which needs to be jostled into variation to obtain a resolution.

§ 5. SELF AND SEX

Self

Six is the center of his own universe. He wants, and needs, to be first, to be loved best, to be praised, to win. "Everything for John," his mother says, is his rule. He believes that his way of doing things is right, and wants others to do his way as well. He cannot lose gracefully or accept criticism. He does not care especially about pleasing others, but may please others to please himself.

Six is his own one-sided assertive self. He operates from a self-centered bias. He is bossy, wants his own way, dominates a situation and is always ready with advice. A few Sixes may be somewhat aware of themselves as separate entities similar to

others but unique in themselves. One articulate Six was able to express this in writing the words, "I am me." Another Six thought about the word "person": "Mommy is a person, daddy is a person, I am a person—three persons." Six is also beginning to be interested in his own anatomical structure.

Though he may have glimmerings of a notion of himself as a person, Six does not behave like a complete person. He is extremely possessive of his belongings, and shows a marked return to the use of the possessive pronouns "my" and "mine." This trait harks back to his 2½-year-old self. He is most secure when he is in control of a situation. Then he shows off, acts independently, boasts, changes any error into success by his qualifying remarks, and would like to play his father against his mother if he could. He often holds the sway of the dictator in the exercise of his new powers.

When the outside world impinges adversely upon his self, he is stubborn, obstinate, unreasonable, distractible. He dawdles, goes to pieces, pays poor attention or becomes over-excited especially as he relates himself to special events. Praise is the one impingement he can absorb with ease.

As a king needs his jester for a little relaxation, Six seems to need to return, on occasion, to babyhood. Some SIXES carry on a conversation with themselves in a babyish fashion. Others talk only to a younger child or to a sibling with baby talk. Still others for a period talk baby talk at all times and to everyone, much to the exasperation of their parents. A few want to become a baby in more ways than just through speech, and may dramatically enact salient bits of a baby's life. Other children may wish to be babies, but may not dare to mention it to

anyone until finally they are able to whisper it to their mothers, adding the reason, "So I won't have to do things."

The shift from present self to a former younger self, that is, to a baby-self, is easily accomplished by the 6-year-old for he seems to have a power to pretend that he is almost anything. He may be an animal, an angel, a princess, a fireman or a parent. He is most organized when he loses himself in some make-believe role. This practicing at being somebody or something else is probably an important step on the way to a full realization of his own sense of self.

The child's own sense of self is also probably in some way strengthened through his interest in the conduct of his friends. There is a tremendous interest at this age in the conduct of friends, whether or not they do things correctly, how they behave. One Six said of a classmate, "The naughtiest girl in the room and her two uncles dying for her in the army." Six frequently projects his own feelings onto others and then criticizes them on this account. The adult feels that the 6-year-old is "fresh," but Six makes this complaint against his friends. "He's so fresh," "She thinks she's everything." Or, in more detail, "She thinks she's a princess with those curls of hers bobbing up and down. But she isn't. You ought to see her drawing!"

Six is also building up his sense of self by his embroilment with his mother and his increasing separation from her. This is expressed in his frequent resistances to his mother and also in his somewhat contradictory responses to her,—strong affection at one minute and strong antagonism the next.

The 6-year-old is beginning to experience an outside world when he attends school, and this extra-mural world may

have standards and rules somewhat different from those he has met at home. In so far as the authorities of school and of home conflict, he himself experiences conflict. Even when there is no marked conflict of authority, many Sixes have difficulty in orienting themselves to two distinct worlds: that of home-mother and that of school-teacher.

Six likes and seeks new experiences, but he tends to be undifferentiated and indiscriminating. "Everything is everywhere" to him. He has limited appreciation of scale or hierarchy, and may be angry that his mother has more possessions than he himself has.

Sex

The relative quiescence of the 5-year-old vanishes at six. His sex interests spread and penetrate many new and varied fields. Six is interested in marriage, the origin of babies, pregnancy, birth, the opposite sex, sex role, and a new baby in the family. The facts of intercourse are still beyond his grasp. A few children at this age who are told of this aspect by older children usually come to their mother to have her confirm or deny the facts. Then the matter is usually dropped and the child shows little interest until the age of eight or older. Six may still be looking backward to the time when he was a baby and may try to recapture that state dramatically by re-enacting some baby ways. These ways are more easy to recapture if there is a baby in the household. Six may go so far as to put on diapers and rubber pants and then wet them. He imitates a younger sibling and especially enjoys talking his version of baby talk.

Six giggles, sometimes uncontrollably, over bathroom words such as "wee-wee" or "pee-wee"; he giggles over panties; over

bathroom situations and exposure of a "belly-button." There is hilarious humor for boys to pretend to "tee-tee" in their mother's lap or on each other; or for girls to pretend that they are boys in an attempt to urinate standing up. Boys especially are apt to expose their genitals before girls and girls are apt to take off younger children's pants. If an older child, especially an 8-year-old, is playing with a 6-year-old, the play may elaborate into doctor play and the taking of rectal temperatures. A crayon, the eraser end of a pencil, the tip of an enema tube or the actual wooden thermometer in children's doctor kits may be used. Since this play is often stimulated by the fact that rectal temperatures have been taken during the child's illnesses, it might well be better to have temperatures taken by mouth. By four years of age a mouth temperature is safe and can be secured, especially if the child is allowed to take his teddy bear's temperature at the same time. This type of sex play can also be fairly well controlled if the rule is made that only one child at a time is allowed to go to the bathroom.

Although the distinguishing roles and organs of the two sexes are fairly well defined in the mind of the 6-year-old boy, he may still wonder why his mother has no penis. He knows that only females have babies, yet he, as a boy, may be upset because he can never have a child, or he may even be fearful that a baby is growing inside of him. A few Sixes still want to be the opposite sex. One 6-year-old girl dressed like a boy with necktie, pants and oxfords. She tucked in her hair under a cap, demanded to be called Johnny, and played with a truck.

Six is definitely interested in marriage. One thing which was not clear in the pre-school years he now is sure of, namely,

that you marry a member of the opposite sex. But this member of the opposite sex may be his mother, his aunt, a sister or a contemporary (or in the case of a girl, her father, an uncle or a brother). Often multiple marriages are planned. There is some vague idea that babies follow marriage, but there may also be some question as to whether a woman could have a baby without being married.

Six is more interested in how the baby comes out than in how the baby starts. He may spontaneously think that the baby is born through the navel, but he accepts readily the assurance that there is a special place between the mother's legs where the baby comes out when it is time. Some children are concerned about the mother's knowing when it is time for her to go to the hospital, and also if it hurts when the baby is born. The presence of the doctor "to help" seems to alleviate any overstress on pain. It is difficult for some to picture a possible opening for the baby to come through, and if the child sees the birth of puppies he may ask, "Who is going to sew up the hole?"

The pregnancy period is not of much interest to Six. He still is scarcely aware of the enlarging abdomen even though it may be his own mother's. It is unfortunate when Six is told of a coming baby too long before the expected arrival. A month or two is quite long enough for him to wait.

Six is at the beginning of interest in knowing how a baby starts. If he has been told some story such as that God makes all babies, human and animal, he will find it difficult to reconcile this fact with his knowledge of dogs having puppies, cats having kittens, and the lady next door having a baby. He now seems to grasp the idea of the baby starting from a seed and is no longer confused by his relating the seed to the ground. One Six

even without the usual stimulus of the seed, thought that he himself came from the ground. He counted backward from his present age, finally got to one year of age, and wondered where he was before that. He asked, "Did I come from the ground?" but readily accepted the fact that he came from his mother's "stomach." Inquisitiveness in regard to the father's role ordinarily does not appear before seven or eight.

Six wants his mother to have another baby, even though there is already one baby in the family. He usually speaks of the baby as a brother or sister. Some Sixes specify that they want a baby of their own or of the opposite sex, while others would be satisfied with either. Boys may be repudiated by a girl as possible siblings because "they fight."

§6. INTERPERSONAL RELATIONS

Six is a trying age for many a parent. One of our parents reports that she dreaded to get up in the morning because it meant one continuous contest with her 6-year-old,—one long "fight, fight, fight." Another parent similarly reported that she could not be off her guard for a single second, for "If he has a thousandth of a chance he will take it."

These comments may seem extreme, but they are true to the interpersonal tensions which are so peculiar to the period from five-and-one-half to six years. No period makes a greater demand upon a sense of perspective and a sense of humor. If the parent recognizes the transitional character of this intense behavior, Six becomes much more manageable and altogether less trying. Life is also made more complicated for him if his outbursts are taken sensitively. And the mother might wisely spare her feelings.

She had better count ten before she reacts too personally to his vehement, "I don't like you. You are mean and wicked. I want to kick you!" She feels blameless, for all she did to earn this explosion was to change the angle of the pillow on his bed! But Six has a delicate trigger psychology, which is more easily accepted than understood.

Spanking will do little good. The child will react with momentary regret or fury, but without any long term improvement in his behavior. He would feel more at one with his mother if she told him a story about another little 6-year-old who was very naughty. Maybe this other 6-year-old said he would get an axe and chop his mother up, or maybe he wished that his mother and father were killed in a fire. In any case, the story of the imaginary 6-year-old should parallel the child's own acts and experiences. What the imaginary child's mother said and did to her child becomes very important to the intently listening 6-year-old. Also he may be able to grasp some idea not only of how children act at this age but what kind of experiences pile up to make them act as they do.

The difficult, rigidly explosive behavior which the parent encounters in the 5½-year-old can best be handled by preventive means, by giving in or by suggesting the opposite of the desired behavior. Direct clashes of will between mother and child should be avoided whenever possible. Parents often use a strenuous direct approach which becomes exhausting for them. They report, "You need to clamp down, or be firm with him," "You have to pound it into him," or "He won't listen unless you're cross with him." An indirect approach or giving him several chances is far more likely to set the child on the move. Doing with him what is requested

may bring out his concealed but latent cooperation. He does not like to do things as a task, but he enjoys doing things with another person, especially with his mother.

Six is sensitive to his parents' moods, emotions and tensions, even though the parents may think they have hidden their feelings from the child. Six also quickly detects any shift in facial expression and reacts badly to the raising of a voice. He cannot tolerate seeing his mother cry, becomes very sympathetic when she is sick, and may show anxiety about her well-being. Although Six is often described as being "embroiled with" his mother, he is actually extremely ambivalent in regard to her. He may say "I love you" at one minute and "I hate you, I wish you were dead" at the next. He is most loving with his mother, yet most of his tantrums are directed against her. He craves her help, especially in domestic routines, yet he often refuses to accept it.

In sharp contrast to his sensitive awareness of the other person, is the kind of behavior often described as fresh, nasty, insulting, impudent, bratty, rude and argumentative. When this side of the child's nature is shown toward grandmother, for instance, unfortunate results may ensue. Grandmothers and relatives in general often take on rights which they might more wisely not assume if they realized in advance the possible results. Six's mother in spite of his frequent embroilment with her, is actually the one person who is his real support and need, and even she may have to "make" him do things. A mere relative therefore may expect such a reply as, "I won't, and you're only my aunt and you can't make me."

Six often assumes a "know-it-all" attitude which makes him seem domineering. A little deferential response from the

parent will soften his imperiousness. Parents need to beware of Six when he is corrected or criticized for he is likely to turn on them in one way or another. A few children react with inward resentment, a few can change the subject, others may attack with words or fists.

Despite all of this furiously assertive behavior, Six still craves affection. He wants to be assured in words of his mother's fondness for him. He may soften to the extent of sitting on his father's lap when he is being read to. Sometimes he gathers a cloak of closeness around himself and one of his parents by having a secret, even in a foreign language. The other parent is not supposed to know anything about the secret. He likes to burst into a close feeling relationship with his parent by some pleasant surprise (such as drinking his milk without protest!).

Fathers can and should play an important role in the life of the 6-year-old child. Girls are said to be "crazy about" their fathers and may demand a goodnight kiss from them. Boys are building up a father-son relationship of affection and admiration. They may demand every minute of a father's time; they respond to pep talks from him; and if he accompanies them to the doctor's office they are less likely to cry. There is something delightful and exciting in doing things with your father: gardening, painting screens, going for a train ride, playing games, or just telling him all your troubles.

There may be a startling improvement in the smoothness and ease of bedtime when father puts the child to bed, especially in the absence of the mother. Baths even may be taken with little supervision, the father being instructed to read his paper while the child undertakes to bathe himself. Going to sleep time may be shifted back a half hour when father takes over.

Even morning dressing takes on a new independence and comradeship when father is close by.

Since the response to father is so excellent, there is a danger that father will be expected to take over the lion's share. But this would be a serious mistake for the child would then begin to respond to the father as though he were the mother, with all the attendant tugs and pulls, detours and explosions. Mother, however, would benefit if the father took over two to three bedtimes a week. With such relief both mother and child would adjust better to each other; for although the child may not be able to get on with his mother, he also cannot get on without her. Growth itself brings its periods of relief, for suddenly in the midst of trying behavior, a two weeks interlude of angelic calm may descend as though from nowhere. Father tiptoes into the house at night and whispers his incredulous query: "Is he still the same?" Parents might well enjoy this lull, for it is sure to end!

Six does not handle a younger sibling well without considerable planning and supervision on the part of the parent. A very few who have difficulty with their contemporaries play well with their younger siblings. They may be devoted to and proud of younger siblings, and eager to share a room with them at night, especially at five-and-a-half, but as a rule they play well together only occasionally. Although they may talk baby talk to a younger sibling at five-and-a-half, they become more interested in teaching him when they are six. They also like to evoke responses from him by making silly noises or by some other device. They may try to goad the younger sibling into being bad in the hopes that he will be scolded.

Six insists upon being first in everything, and his whole day may be spoiled

if a younger sibling gets downstairs in the morning before he does. He is jealous of any attention or present bestowed upon his younger sibling. If a guest unwittingly neglects him, he can be readily satisfied by a simple appeasement gift from his mother. One may need a reserve supply of such gifts on hand when there is a younger sibling in the household. A few SIXES go to the extreme of demanding a duplicate of many of the younger sibling's toys.

Six may be bossy with a young sibling. He argues, teases, bullies, frightens, torments, makes him cry, hits him, gets angry with him, and may on occasion fight terrifically. Sometimes it is the younger sibling who irritates the 6-year-old. Six gets along fairly well with an older sibling, but is likely to be overstimulated.

Although some SIXES play well alone, Six generally wants other children to play with. A fair proportion play well either with children their own age or with those somewhat older. A half hour of indoor play is usually maximum. Outdoor play is better sustained. Sex lines are not sharply drawn and preferences are often dependent on neighborhood availability.

Two-somes are the rule, but small groups are forming. The make up of these groups is very shifting and group activity may go on in a manner so unorganized that any individual child may leave the group without disturbing the play. There is a great deal of exclusion of a third child by two others, and concern about whom friends are playing with: "Are you playing with So-and-So? All right then, I'm not playing with you!" Six does not get along too well with his friends in play, even though there is considerable interest in and talk about "school friends" and "playmates." Children worry a good deal about their friends cheating or doing

things the wrong way, and there is a good deal of "tattle-taling."

As to younger children, Six is apt to handle them in the same way that he handles a younger sibling. He bosses and teases, and if not watched may lock a younger child into a small enclosed space.

Six is usually either in high favor and sought after by the other children, or he is disliked and excluded from play. Some SIXES buzz around a girl of comparable age as though she were the queen. She in turn may dismiss one after the other in a queenly fashion. Another dominant 6-year-old may provoke crying in a whole series of children who have rebelled against playing "her way." Some SIXES are picked on, terrorized or knocked down. Older boys may lie in wait to beat up a 6-year-old. Older boys also tease SIXES to get rid of them, or they simply send them home. Some SIXES lose their appetites and others lose their tempers in response to such teasing.

Six is often rough in his play. He threatens to go home, he quarrels, he calls names, he pushes, he (or she) pulls hair, kicks and fights when things are not going the way he wants them to. Some SIXES do not know how to play roughly, are terrorized by physical combat and should be protected accordingly by teachers as well as parents until about the age of eight years when a child is able to cope with rougher experience.

In view of Six's multiple difficulties in interpersonal relationships, one may not expect him to be too much at ease with people or willing to meet them. The blank look, the inability to say "Hello," the unknowing impoliteness, are all a part of his callow nature. In another year he will be able to give a better account of himself,—so why make excessive demands upon him a year too soon?

§ 7. PLAY AND PASTIMES

In General

In his play activities, Six spreads himself as he does in everything else. At five years the play episodes were restricted and confined; they now have spreading scope and movement. Six's mother says, "Whatever he is doing is all over the place."

Six continues many of his 5-year-old interests but with more intensity of feeling. His mother reports that "he *loves* to paint and color." Cutting and pasting are done as needed. He draws more actively than formerly. Boys prefer to draw airplanes, trains, train tracks and boats with occasional persons; but girls prefer to draw people and houses.

There is a very real return to an earlier interest in earth and water. Six-year-olds revel in their "muck shops" and enjoy making mud roads and houses. Boys especially like to dig. Their holes become tunnels and foxholes with boards for a roof over them. Digging may evolve into gardening and the planting of seeds. But having made the start, Six usually finds it too difficult to continue the care of his garden.

One of the most positive new demands made by the 5½ to 6-year-old child is for a bicycle. Boys often demand an electric train. The urge for a bicycle at this age seems to be based on a need and a desire for locomotor leg exercise and body balance, rather than on mere possessiveness. Many children would be satisfied if they could borrow a small bicycle until they have learned and have had some successful experience. If this early urge were satisfied, ownership of a bicycle might be put off until the child is more ready for the responsibility.

Sex differences in choice of play are defining themselves more clearly. In gross

motor and imaginative play both sexes, however, find a common meeting ground. Both sexes like to "tear around" in running games such as tag and hide-and-seek. Both like to roller skate, swing, swim, and do tricks on bars. Both indulge in ball play; but girls are apt to bounce a ball while boys attempt the rudiments of baseball. Girls delight in jumping rope.

The quick capacity of Six to pretend greatly enriches his play life. A bed rapidly becomes a fort, a group of chairs a boat. Girls are more likely to play school, house and library but certain boys are often ready to join with them. Girls also like to dress up in costumes, including hats, slippers, lipstick and housecoats and may at times turn their play into a dramatic performance. At five-and-one-half there is a good deal of doll play which consists chiefly in the dressing and undressing of dolls. Nude dolls clutter the house and playroom. By six, doll play is at its height. There is much interest in the paraphernalia of doll play: doll clothes, suitcases, wash-baskets, swings, stoves and the like. Playing house which includes the use of dolls also is a great favorite. The mother role is definitely the favorite, and there is a marked aversion to the impersonation of baby. Some younger child, if present, is usually forced to take this inferior role.

Boys may take part in school and house play but they are more apt to play war games, cowboys, or cops and robbers. Shooting the enemy and getting under cover are two characteristic forms of play.

Boys show a marked interest in transportation and construction. Besides a very genuine interest in electric trains, they are interested in airplanes and more particularly in boats. Some girls may share with them an interest in blocks, builder

blocks and work bench activity. At this age many children start the "collections" which will later use up so much time, energy and space. At present these collections are extremely miscellaneous and undifferentiated, consisting of toys, fancy paper, Xmas cards, or mere odds and ends.

If asked what he likes to do best, FIVE-AND-A-HALF will answer, "Play with my —doll, bicycle, blocks, train, wagon or truck." Six answers, "Play with soldiers," or "Play with dolls."

Reading and Numbers

Six is taking a more active part in reading. Through his repeated hearing of favorite books, he may "read" stories from memory as though he were really reading the printed page aloud. He is also interested in recognizing single words in familiar books and also in magazines. He enjoys printing his letters to spell real words and he also enjoys simple oral spelling as a game. Boys especially enjoy thinking about numbers, and like to read any number they see. Many of the table games that the 6-year-old plays fit in well with his intellectual interests. The favorites are anagrams, dominoes, Chinese checkers and simple card games that mainly demand matching.

Six continues to like stories about animals, but he is also branching out into an interest in nature and birds. Many SIXES enjoy poetry. The book which Six would really prefer would be a diary about himself. Daily comics and comic books telling about animals are beginning to make a steady inroad into his life.

Music, Radio and Movies

Although some children still prefer their own phonograph records, the majority of 6-year-olds listen to the radio for at least a few programs each week. A few prefer

the musical numbers, but the majority listen to a variety of talking programs (often dependent upon what their older friends have mentioned). A certain number of the less sensitive boys may listen to the hour of late afternoon programs which deal with action and shooting. When a choice needs to be made between the radio or outdoor play, the latter usually wins.

Few SIXES are ready for theater movies. They like short home movies about nature, and best of all cinema records of their own earlier years. If allowed to go to the movies they are likely to become restless, closing their eyes and stopping their ears to shut out any fighting or shooting. They may weep over sad scenes and finally have to leave the theatre. Musicals and animal pictures are the best accepted.

§8. SCHOOL LIFE

Six shows a positive anticipation of first grade. His mother usually accompanies him on the first day but this adjustment is more assured if he has visited the teacher and has seen the room and materials previous to his induction into the group. The majority like school and want to do "real work" and to "learn." They like to do "everything"; they do "too much." Dislike of school ordinarily does not occur until the end of the year when the child for one reason or another has been unable to maintain his place in the group. Not infrequently, however, an unpleasant experience makes him refuse to go to school for one or several days. Perhaps he was frightened by a story, or was asked to put on his rubbers by himself or was asked to count and pass the crackers! He may limit his refusal to a certain day when he knows there is to be

an activity he does not like. He may still wish to go to some other school, perhaps to one that he has formerly attended.

Even under the best of handling, Six will probably be fatigued by his difficulties of adjustment and will have his share of colds. Two weeks after school starts absences become a common occurrence throughout most of the year. But some controls can be instituted to alleviate these absences. The 6-year-old is not ready for all day attendance. He still profits by an activity rest period at home when he is alone. He may adjust to an all day session by Christmas time. In some groups Monday is the poor day after a week-end at home, in others it is Friday after a week at school. Adjustments are best planned according to the group.

The interrelationship of home and school is important to the 6-year-old. He brings many things to school: stuffed animals, dolls, flowers, bugs, shells, fruit and especially books. These are brought to show his classmates, or more especially his teacher. He may also bring a treat of cookies for the whole group. He also takes things home as well, such as his drawing and his carpentry. His parents' response means a lot to him. The thrill of the year comes when he takes home the first primer he has mastered. It is to be hoped that parents will not criticize any errors at this moment of triumph.

Parents often are disappointed that Six reports so little about his school experiences at home. Six is most apt to bear tales about bad things other children do or to boast beyond reality of his own accomplishments. The outstanding non-conforming child is sure to be reported upon by most of the children in the group. A bedtime chatting period is an excellent opportunity for the 6-year-old to talk about himself and his school experiences.

Parent-teacher interviews by telephone or by appointment provide a means of reporting significant home or school behavior. The teacher not only gains from these interviews but the mother comes to feel that she is more a part of the school family, ready to step in and help whenever she is needed.

In characterizing first grade behavior, teachers comment as follows: "One day it is very exciting to teach first grade; the next day it is very dull." "Sometimes you have to work very hard; at other times you don't have to work at all." There are wide swings of behavior. "Things come in spells, like talking out loud all the time. You handle that specific behavior, try to counteract it as well as you can (whispering is the antidote) and suddenly the behavior has disappeared and all too soon something else takes its place."

Despite these ups and downs, these extremes, Six wants to work. He would be continually happy if life were just one long series of beginnings. He gasps with excitement in his eagerness to tackle a new thing. It is the middle of a task which confuses him. He may want to give up, but with his teacher's help he may see the end and then he is thrilled to attack the end as a new beginning. Any help or praise from his teacher spurs him on; he is trying to conform and to please his teacher and himself. He likes an opportunity to show and talk about his finished product.

The activity program at six includes crayons, paint, clay, carpentry and large outdoor blocks, materials familiar from kindergarten days. These, however, are now approached more spontaneously and more experimentally. Products show a new creativeness, though the child may for a short period do the same picture or painting over and over again. He needs some

simple direction and help to plan what he will do, and also needs guidance along the way. Direct interference, however, is not tolerated by SIXES.

Learning to utilize symbols in reading, writing and arithmetic is his new challenge. Six especially likes group oral work since he is such an incessant talker, but he is more flexible than he was at five, and likes a variety of approaches to learning. He likes to recognize words which the teacher puts on the blackboard, and to write at his desk. (He cannot copy from the blackboard with facility as yet.) He begins to print small letters although he tends to reverse them and to revert to capital letters. Capitals are simpler to form and have less reversibility. With certain children, capitals probably should be used throughout first grade, or at least until the child shows a spontaneous desire to shift to small letters. Writing as well as reading induces the typical tensional overflow of chewing pencils, hair or fingers. Six likes to write something for his mother or father. He may recognize his reversal of a letter but he does not always stop to correct the reversal.

The 6-year-old is learning to read combinations of words. He comes to recognize words out of their familiar setting and learns new words out of text before he approaches them in text. He makes a variety of errors: He adds words to give balance (*a king and a queen*). He reverses meaning (*Come for go*). He substitutes words of the same general appearance (*even for ever; mother for mouse, saw for was*). He adds rather than omits words (*little, very, y* at end of a word). There is also a tendency to carry down a word which he has encountered on the line above. Pronouns may be interchanged (*you for I*).

Many children use a marker or point

with their fingers, at this age, and they may bring their heads closer as they continue to read. Mouthing of pencil, tongue, hair or fingers is frequently seen, as well as wriggling or even standing up.

Six still likes to be read to both at home and at school and will listen to almost anything you read to him. He takes his primer home to read but may also try to read the books he had when he was younger.

Six is learning number symbols (digits) as well as letters and they are similarly reversed. In writing numbers he may say: "I never do 2's so good." "Some people make 8's like this." "I wonder if I'm making these backward." "I'm tired. I'm hot too." The one by one counting of objects is less evident; he begins to group objects into four of this and five of that. Balanced pairs as 3+3 or 5+5 are favorites.

At this age girls are usually better in reading, writing and drawing while boys are better in number work and listening to stories.

Six does not enter the classroom with the directness of FIVE. Some may even dawdle outside. The teacher is ready to greet the child, inspect what he has brought or give him a reassuring word when necessary. He still needs some help with rubbers and difficult articles of clothing and the teacher should be ready to supply needed help. The better coordinated children are often eager to help those who cannot manage by themselves. A few do best if they dress apart from the group.

Six shifts from one activity to the next with comparative ease. He is willing to stop even though he is enjoying what he is doing and can leave a task incomplete and finish it the next day. If there is too much slack between activities the boys especially are apt to wrestle with each other.

Toileting is relatively easy, if the toilet adjoins the room. Six can go by himself although he may announce that he is going. He accepts the teacher's suggestion of a special time if he has not gone already. Girls and boys can use the same facilities which preferably should not have doors. Doors seem to stimulate a new awareness of functioning, expressed in giggling and peeking.

Six is oriented to the whole room and to the whole group. He is constantly on the move or manipulating things. He is impatient when his flow of movement is interfered with unless by chance you are going in his direction. He talks of his own performance and that of others. Occasionally an argument between two children may attract one child after another until the whole class is attentive, but as a rule it dissolves as another child picks up a mere thread or word of the conversation.

Characteristic verbalization during free play is illustrated by the following:

- "I won't be on your side if you do."
- "Oh I know that one."
- "Look Rosalie, this is the first page."
- "Let's change places in the desks."
- "Miss H. do you know what SF means?"
- "I need an eraser and I can't find it and I need one."
- "Miss H. I'm going to the bathroom."
- "Oh shoot the shoot pifs."
- "I'll shoot the mess pot in the middle of the mess."
- "You want red. I want blue."
- "If he finishes it any more he'll ruin it."
- "Hey, you started it." (snatches book)
- "Give that right back." (snatches book)
- "You know what I'm doing?"
- "Fall. That's when you fall down. That's when the apples fall. That's why we call it fall."
- "Hello measles, hello chicken pox."
- "Hello whooping cough."

Six enjoys the feel of the group. Groupings are often of twosomes and are fre-

quently shifting. The activity determines a group in part but emotional responses are now playing a stronger part. Certain children are apt to spoil group games and the proximity of the teacher may help, but often these children need to be kept apart and busy with something they enjoy doing such as digging or building

§ 9. ETHICAL SENSE

The growth clock appears to be set backward at the very important age of five-and-a-half to six years. In one sense this is true in reality for the child is acting very much like his former 2½-year-old self. Both of these ages, however, may be thought of as a back lash of reorganization preparatory to new organization. Parents need to feel what is happening within the child's organism and should adapt their demands to that organism, so that he can grow into more of an entity in himself, and thereby become more of an individual capable of further adjustment to his ever expanding environment.

Girls as a rule, with a greater fluidity of mental structure and with a more flexible but continuing contact with their environment, do not experience the more extreme patterns of disorganization that boys exhibit. Girls are better at conforming. But the tendency of both sexes is to respond more slowly or to respond negatively to any direct demand put upon them. Given time, however, they may respond in their own way even as though from their own initiative. Many children need to be reminded of a thing two or three times to build up a stimulus strong enough to secure response. The responses may vary with the child's wishes and moods.

If the parent tries to press a command with a firm tone of voice she may antici-

pate an opposite response on the part of the 5½ year-old. The 6-year-old under similar pressure will defy his mother with a "No I won't," or "How are you going to make me?" If threat of physical punishment, or actual physical punishment is resorted to after such defiance, the results are usually poor. The child becomes furious, mimics his mother during the punishment and shows only a tendency to repeat the performance on future occasions. Preventive methods or the use of magic such as counting are far more effective. By six, the child responds better to some form of isolation such as play in his room or sitting on a "thinking chair"—formerly known as a "naughty chair." And how he loves to be praised! He preens himself like a peacock and his behavior is tremendously improved.

It is not easy for FIVE-AND-A-HALF to make up his mind. It is almost as though he were held in a vice made up of two opposing forces. This causes him to shift his decision back and forth. When Six vacillates between two choices, he almost invariably ends with the "wrong" choice. That is why the parent may need to make decisions and to state clearly what is to happen and how the child is to act. When Six finally does make up his mind, rarely can anything make him change it, even on those occasions when he has made it up with relative ease. There are very few 6-year-olds who can be reasonable about changing their minds; but there are a few others who are almost too conforming.

Six is not only aware of "goodness" and "badness" in himself and in his acts, but he wants to be good,—especially if it does not take too much effort. He asks whether he is good, and he wants his mother to prevent his naughtiness. "Badness" separates him emotionally from his mother.

He shows his wish to be accepted by his mother when he asks, "Even though I've been bad you like me, don't you?", or when he says, "Let's be friends, mommy." He does not want to hurt people and he feels sorry and may even cry about it if he does. He is unusually aware of what in his estimate is "badness" in a younger sibling, and he may even go so far as to classify all people into "good people" and "bad people." But if he answers his own question, "Why are the German people bad?" he will reply, "Because Hitler is bad!" In his way of thinking it is parents who determine allowed things and forbidden things.

To the 6-year-old things which his parents allow are good things; things which they forbid are bad things. An expressive 5½-year-old has spontaneously dictated to her parent the following list of *Things To Do* and *Things Not To Do* which clearly defines her idea of good and bad.

Things To Do:

1. To say "I think you are eating good things today."
2. Pleasant things are lovely to do:
 - a. To eat nicely.
 - b. Always say "please" and "thank you."
 - c. Always remember to say "Good morning, good afternoon, good evening."
3. To go on a boat when the war is over.
4. Eat dinner by ourselves without having to be reminded.
5. Keep quiet and answer people when they are talking to you.
6. Keep dresses clean.
7. Turn on the radio when the air raid is on (local station).
8. Keep watches going—winding them up.
9. Go to bed at 7:30.
10. Wake up at 7:30.
11. When people are breaking things tell them to stop.

Things Not To Do:

1. Not to say, "I am not talking to you."
2. Not to say, "Give it to me."

3. Not to say, "Give me the biggest piece of anything."
4. Spill crumbs on floor.
 - a. Spill milk or water.
 - b. Get food on hands or faces.
5. Set fires anywhere.
6. Pulling away from someone when they are doing something nice for you.
7. Slamming doors.
8. Putting on lights in an air raid.
9. Don't telephone to anyone in an air raid.
10. Don't tear books.
11. Shouldn't keep windows open when it rains.
12. Don't tear clothes.
13. Don't break windows.
14. Don't call people when they are busy.
15. Don't break arm chairs.
16. Don't pinch people.

Some SIXES are capable of accepting responsibility for their acts. Yet they may say, "It was an accident," or "I didn't mean to do it." But the 6-year-old and more particularly the 5½-year-old, is apt to blame siblings, other children, mother, an animal, or even some inanimate object. If the misbehavior was very serious, however,—a football thrown through the living room window,—the child is often able to take full responsibility. The big things of life are easy. It is the little things that cause the most trouble. Perhaps it wasn't so difficult for George Washington to confess that he had cut down the cherry tree!

FIVE-AND-A-HALF and SIX are much better at winning than at losing, just as they love praise and cannot tolerate criticism. That is why they should not be put into positions where they are likely to lose. If they are, they may be forced into cheating in order to win. Six loves to make up spontaneous games with rules which shift in the middle of the game. These are the kind of games he can handle. He has the controls and can shift the rules to his advantage.

Taking things belonging to others and

telling tall tales are more common at Six than the adult often wishes to believe. The distinction between mine and thine is almost as difficult for a 6-year-old to make as it was when he was two-and-a-half. "Mine" is uppermost in his mind and he easily grasps near objects that he desires, holds on to them, and adds them to his collection of just "things." Or he may have some real use for some of the objects which he takes. Girls are likely to take their mother's jewelry, slippers or a house-coat. If they ransack their mother's purse they rarely take any money, but prefer keys or lipstick. Boys prefer pipe cleaners, matches and little odds and ends from their father's desk drawer.

From school they take such innocent little items as a barret, a piece of clay, a peg, a piece of black paper or an eraser. Children who have taken things themselves are the first to criticize other children as "awful" when they take things. Six is usually caught in the act for he takes things with others looking on. But even with the evidence before his eyes, he will flatly deny any relationship to the object in question, or will alibi with some statement such as, "Tommy gave them to me." Six can least of all tolerate direct correction in matters of conduct. He cannot even accept it in the less personal fields of reading and arithmetic. But he will readily respond to an indirect approach if asked, "How did you break all those bottles?" or "Where did you find those matches?"

When he has told all, which is not difficult if he is not directly accused, he can plan with his parent how he can act better next time. Perhaps he needs things locked away to help him to remember; or he may need supervised experiences with fire. Or his teacher, in cooperation with his mother, should allow him to take

certain things home from school. Then his mother can help him to return them when he is ready. If he takes things without permission, he is likely to destroy them. If he is made to return them, he can often best accomplish this with his mother by his side. Occasionally, at his request, it is advisable for his mother to return them for him.

A few children can handle their desire for new things by swapping. The bargain may be relatively fair—an elastic band for two pennies,—but as a rule someone gets the poor end of the bargain unless an “even swap” of similar objects is made. Six may also overdo his generosity, because of a greater interest in giving than in receiving. He needs to be protected from giving away his really valuable possessions.

Six is eager for more and more possessions. He is a great saver. He wants toys for the toys' sake almost more than for his interest in playing with them. If a guest arrives at a 6-year-old's home without a present he will probably receive criticism. Though Six likes to have quantities of possessions, he is extremely careless about them, mislays and loses them. It is the 6-year-old whom one sees downtown looking sad and bewildered while his mother demands, “Well, where did you leave it?” Six is often destructive of his possessions, and if he is held responsible for the upkeep of his room he dawdles over or kicks his toys in the process of picking them up. He usually lives in a “mess,” but he responds cooperatively if his mother helps him and occasionally he likes to surprise her with a tidy room.

Money is becoming of real interest to the 6-year-old both in the form of an allowance (5c to 10c a week) and as a reward. Little chores such as emptying waste paper

baskets, putting out milk bottles, drying dishes, or even eating a good meal are done more willingly when a reward is in view. Some children want only to save their money, put it in the bank; others spend for candy and cookies; others are extremely careless with it; but a few really want to put it to use and buy something special. Six may spend an hour in the ten cent store trying to decide on a purchase, and finally comes out with a roll of adhesive tape.

§ 10. PHILOSOPHIC OUTLOOK

Death and Deity

Six is often the peak period in these middle years of the child's interest in a creative power to which he can relate himself. Although he at first found it difficult to comprehend a God who saw him, but whom he did not see, he now relates God in his mind to the larger sphere of creation. He grasps the concept of God as the creator of the world, of animals and of beautiful things. He accepts these larger concepts at six, even though he will soon think them over, become skeptical, and need to have them further explained.

Six asks to go to Sunday-school. He likes to listen to Bible stories and could hear the story of the Little Lord Jesus over and over again. He especially likes to participate in a short ritualistic service with balanced candles on an altar. By his acts in his very real attempt to conform to what is demanded of him, and by his facial expression, he shows that he feels the awe of this ancient group worship. He is now developing a feeling relationship with God. Prayers become important to him. He feels confident that his prayers will be answered. If his mother would pray for a boy, he feels that she would

receive one. And he hopes that if he prays, "Dear Jesus God, let me go through a red light without being killed," that this too will be granted.

God also has his counterpart in the bipolar mind of the 6-year-old. Six may be unusually susceptible to the teaching about the Devil, although such teaching is uncommon in the life of the child today. One 6-year-old recognized two forces fighting within her and acknowledged that the one who had all the bad ideas usually won. She invented a name for this opposing force by pronouncing her own name backwards. Having named it, she had more control over it. God also becomes his own counterpart when his name is used profanely. This is fairly common at six.

Death also becomes more related to Six's feeling self. He is fearful that his mother will die. He is beginning to be aware of any deaths that may occur in his immediate surroundings or to relatives and tries to penetrate the causes of these deaths. Besides dying from old age, he realizes that you can be killed. Also, he makes a slight connection between sickness, medicine, hospitals and death. There may be a preoccupation with the appurtenances of death: graves, funerals, being buried in the ground. Children discuss these matters and may express dislike of the notion that their relatives or they themselves should be buried in the ground. Six often needs to be protected from death experiences. Pictures of dead children may haunt his dreams. Seeing a dead animal is an experience he does not forget easily. He asks, "How long does it take to die?"

Six may think that there is a reversible process to death, that you return to life after you are dead. Even in his thought processes he may express to a friend, "I

wish you had never been alive! And then other times I don't feel like that at all." His best acceptance of death is that someone else takes the dead person's place: puppies take the place of dogs, and children the place of their parents. If Six feels the immediate possibility that his mother might die, then he needs to think of someone, perhaps an aunt, as a possible substitute for his mother. One child became caught up in this process of dying and said, "First mother will die, then I will live with Nancy. Then Nancy will die and I will live with Hulda. Then I don't know who I would live with if Hulda should die. I think about it and it scares me."

Time and Space

Six does not live as much in the Now of time as did FIVE. He wants to recapture time past, and shows marked interest in hearing about his own and his mother's babyhood. He penetrates the future by the sequence of significant holidays and family birthdays. Duration of an episode in time has little meaning for him. He shows little interest in learning how to tell time beyond the hours. He answers correctly such questions as:

What time do you go to school?
What time do you come home from school?
What do you do in the fall? in the spring?
What grade are you in?

The space of the 6-year-old is definitely expanding beyond what it was when he was five. He is now interested not only in specific places but in relationships between home, neighborhood and an expanding community including school. As at four, he likes to return to his neighborhood visiting. He knows the names of some streets in his neighborhood, and the location of some major points of interest.

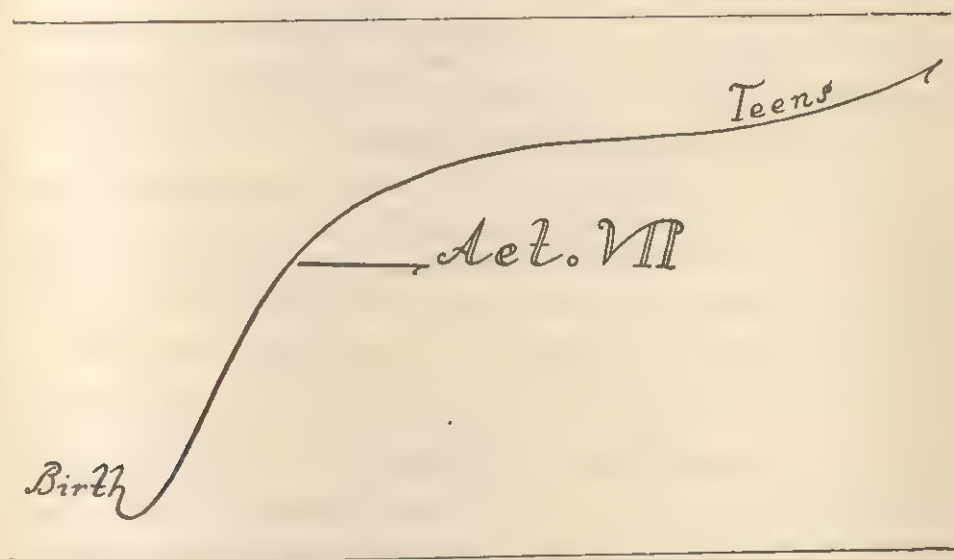
He may even be so aware of a special sequence of spatial relationships that he may fear he will get lost if he doesn't stay on a known specific route.

Six is learning to distinguish his own

left from his own right hand, but he cannot distinguish left and right in another person. His spatial concepts like so many others are relatively undifferentiated.

7

SEVEN YEARS OLD



BEHAVIOR PROFILE

THERE is a kind of quieting down at seven. Six-year-oldness tended to produce brash reactions and bursts of activity. The 7-year-old goes into lengthening periods of calmness and of self-absorption, during which he works his impressions over and over, oblivious to the outer world. It is an assimilative age, a time for salting down accumulated experience and for relating new experiences to the old.

By this token the 7-year-old is a good listener. He likes to be read to;

he likes to hear a twice-told tale. Picture him huddled or sprawled before the radio, endlessly listening. Picture his response to a sudden interruption; he resents intrusions on his ruminations; he feels ill at ease if he cannot bring them to a conclusion. All this means that he has already reached a higher level of maturity. Explosive bipolarity is giving way to inwardized consolidation. He, therefore, seems more introverted than the callow 6-year-old. Parents often say, "He is a better child now!" Basically he is, of course, the same child in a new stage of growth.

Seven is a pleasant age, if one respects the feelings of the child. His feelings need a new and even subtle regard because he is prone to lapse into musing moods during which he orders his subjective impressions. This tendency to muse is a psychological mechanism by which he absorbs, revives, and reorganizes his experiences.

As adults we scarcely appreciate how much a 7-year-old still has to learn,—not in factual knowledge, but in comprehension of the meanings of the manifold life situations which impinge upon him at home and at school. These meanings are essentially feelings. They do not emerge in definitive patterns; they must be "worked over," and practiced through mental activity. Just as a 40-week-old child exploits two cubes by tilting, tapping and combining them, so a 7-year-old manipulates his new found psychological materials through the exercise of reflective phantasy. This is a growth process. Thereby he learns to modulate the meanings of things and of persons. Thereby he overcomes the primitive impulsiveness of 6-year-old maturity and advances further into the intricate culture which continuously invests him. Never forget how vast that culture is, and how innocent of its structure is the mind of the 7-year-old! He needs his moments of reflection as well as of action. Through his inner life as well as through his outward conduct he achieves his adjustments.

This inner life is the hidden subtle aspect which demands some deference from us. We cannot do justice to the psychology of the 7-year-old unless we recognize the importance of his private mental activities. They account for his occasional brooding, his heedlessness, the minor

strains of sadness and complainingness, his sulks, his mutterings, his shynesses, and a certain pensiveness which is not without charm.

He takes in rather more than he gives out. In another year he will be comparatively expansive, projecting himself into the environment. Now he mulls things over in terms of their repercussion upon his personal self. His mentation is more intensely active than appears upon the surface. He will be in a brown study and then suddenly light up with a flash of insight and dash off to proclaim or carry out the revealed idea. He is a good guesser, and he sticks to his guesses. Asked to explain his intuitional cogitation he says, "... You see I just notion some way in my mind."

Although given to self-absorption the 7-year-old is not an isolationist. He is becoming aware not only of himself, but of others. He is increasingly sensitive to the attitudes of others. He is beginning to see his mother in new perspective. He achieves a measure of detachment from her, by developing added attachments to other persons. Very frequently he (or she!) longs for a baby brother or sister. He shows a new interest in his father and in playmates of an older age. And usually he becomes very fond of his teacher. We can see his personal-social reactions deepening at home, on the playground, and in the schoolroom.

This socializing susceptibility is most transparently displayed at school. His joy is unalloyed when his teacher smiles upon him. He brings her a red apple. He likes to be near her, likes to touch her and to talk to her. He talks in order to establish a personal rapport, and to mobilize his abilities. At the beginning of a task he asks, "Shall I start now?" as though he could not begin without a verbal sanction. He seems very dependent upon reminders and verbal guidance. When he is older he will be more self-contained, more self-dependent, at least in the simpler school tasks.

In a genial second grade room each child is likely to have a personal relationship to the teacher. The wise teacher recognizes this relation as a developmental mechanism. She quietly circulates about the room so that she may come into personal touch with and talk individually to her

children. She knows that they need speech to make social contacts and to clarify their thoughts. She uses this individualized conversation as a technique to maintain rapport, to set up challenges, and to foster self-reliance. She does not rule from a throne. By setting up sympathetic two-way relationships she exerts a powerful influence on the emotional organization of her pupils. Personality development is of great importance at this age. The second grade is peculiarly in need of sensitive and perceptive teachers.

At home as at school the child's personal-social behavior shows an increasing awareness both of self and of others. He is more companionable than he was at six and less likely to get into intense entanglements with his mother. He uses the mutual pronoun "we" in referring to himself and his mother. He likes to do things for her and for his father, if they do not hold him too long and too strictly at solitary tasks. He is better fitted for short tasks and needs the recurring support of friendly language. With such support he becomes a happy helper and errand runner during an afternoon in the garden. He likes to please.

However, he also has a deepening vein of independence. Accordingly he will on occasion resist his mother with an argumentative, "But Mommy. . . ." Sometimes he withdraws mutteringly into himself, hinting that he does not want to be a member of the family, and that the family does not like him! He can be "mad at mother" and assume a sulky mood. We may suppose that this "againstness," if not carried to extremes, is part of a normal process of developmental detachment,—of self-weaning. It is a more mature form of behavior than the verbal aggressiveness and the direct physical attacks of a year ago.

In terms of development it is entirely natural for the 7-year-old to be at times amenable and at other times assertive. Indeed he is not so stably organized that he functions at one well-sustained level. There is considerable variability from day to day and within a single day. There are mood changes from sweet-and-good to cross-and-tearful.

His self-dependence, however, is not robust enough for highly co-operative play. His group play is loosely organized and individual ends

are still the most prominent. Bull-in-the-ring is a typical game which reflects his general level of cooperation. He is not a good loser. He tattle tales. If a playground situation grows too complex and things go badly, the 7-year-old runs home with a more or less righteous declaration, "I'm quitting,"—followed by muttered aspersions of "gyp," "mean" and "unfair."

Let us be duly grateful for this germinating righteousness. It is evident that the 7-year-old is developing an ethical sense. He is discriminating between good and bad in other children and even in himself. He is beginning to be conscious of the *attitudes* of his playmates as well as of their actions: "I don't want the kids to make fun of me!" He is ashamed to be seen crying. His crying is less infantile than it was at six; it comes more from the inside, often from wounded sensitiveness. Nevertheless he is learning to pull himself together and to stop crying. He tends to be a more polite and better child when away from home, which also betokens a regard for the good opinion of others.

Tantrums are vanishing. Instead, the child removes himself from the scene through fits of sullenness, or through a hasty retreat with a slam of the door. Even in these moods there can be a wrestling of the soul,—a wrestling not without ethical import. Alibiing and blaming on others are common traits. The blaming is usually ill-founded; but the alibiing may have a touching trace of conscientiousness: "I was *just* going to do it."

With this degree of self-deception we may expect a certain amount of so-called lying. But there is an increasing concern over the wrongness of lying. The concern is, actually, in excess of the child's intellectual capacity to tell the truth and should not be imposed upon by severe appeals to his honor. His sense of property is likewise immature. He will appropriate pencils, erasers, and the music teacher's pitch pipe, with a nonchalance which would be amazing did we not realize the complexity of ethical honesty. It is too early to label his shortcomings as thieving. If he fails to realize that the pitch pipe belongs to someone else, it is because he is too completely absorbed in the satisfaction of

owning the pipe himself. In another year he will probably be able to project that feeling of satisfaction upon the true owner. And then he will make a culturally adequate distinction between thine and mine. He will consider the injunction Thou shalt not steal!

It takes time for these ethical feelings of meaning to grow. Again we must recall the extreme complexity of modern culture and of the process of acculturation. By dramatic projection the 6-year-old identifies himself with the culture chiefly in terms of action. The 7-year-old projects in terms of feeling as well as of action. He is coming to feel the import of actions both for himself and for others. He has some symptomatic worries. His developmental task is to adapt his emotional reactions to cultural sanctions and yet preserve his own identity. He must apprehend life emotionally as well as intellectually. His growing intelligence is manifested in insights; his growing wisdom in feelings of meaning.

At the age of seven we see new evidences of reasonableness and of critical capacity. The 7-year-old is more reflective; he takes time to think; he is interested in conclusions and logical ends. You can reason a little with him even in ethical situations which are charged with emotion. He himself uses language more freely and adaptively; not only to establish rapport, but to make running comments on the matter in hand. Often these comments are self-critical: "I can't do that." "I can't think of the next thing." "It may come out all right." "I haven't had that in school." "I think I know." "I can't figure it out." "Are you supposed to do that?" "Oh, wait a minute." "I'm stuck." "I got to think it over." "What's the matter with me! It's crooked, I can't make it straight."

And then out comes the eraser. Time and time again he expunges with rubber the valiant strokes of his pencil. We might almost call seven the eraser age. Sometimes he mutters self-disparagement as he erases and blows upon his work; but he strives none the less for improved results. That the disparagement is touched with a trace of sadness is in keeping with 7-year-old character.

Part and parcel of this maturity is the child's *perseveration*; a tendency to continue and to repeat a behavior which affords satisfaction. He listens

endlessly to the radio. He draws a bomber which takes his fancy. He draws it over and over again with few variations. He perseverates at active as well as quiet games. Having started a bout of chasing or wrestling he tends to go it wilder and wilder until the game deteriorates. He is a better saturater than shifter. At card games, he likes to keep on playing till he wins.

On all these counts it is clear that the 7-year-old has progressed well beyond the impulsive and episodic tendencies of 6-year-old maturity. Although self-centered he is less completely self-absorbed. His thinking is somewhat more personal-social. It is more prolonged, more serial, more conclusive. It is also more inquiring even when he withdraws into himself to work over his experiences into feelings of meaning. He is less closely bound to the here and now.

His mental life is embracing the community and also the cosmos. He has a more intelligent awareness of the sun, moon, clouds, heat, fire, and the earth's crust. Heaven and earth are uniting. At six he portrayed the sky with a patch of blue; now his drawings fill the void; earth and sky join to make an horizon. The people who inhabit the earth take on more sociological meaning: the policeman, the grocer, the fireman. The 7-year-old has an expanding interest in the community. In all candor, it should be said that he is not too interested in the vanished culture of The American Indian, even when the course of study calls for an Indian life project!

The 7-year-old is attaining orientation in time as well as in space. He can read the clock. He can tell the season of the year and usually the calendar month. Although he can associate a specific time with a specific task, he cannot be depended upon to note the time. His characteristic self-absorption too easily interferes. So he needs warnings in advance. And if he fails, he will plead, "Oh, but you didn't remind me." He wants and expects to be reminded.

Although he is interested in fairies, in supermen, and in tales of magic, he is beginning to manifest an almost scientific interest in causes and conditions. Secretly or otherwise he entertains some skepticism of

the veridicality of Santa Claus (but not to the detriment of his Christmas joys and illusions). He betrays a thoughtful interest in God and Heaven, and asks concrete questions about them. He has given up the idea that God shoves the clouds around. He is not overcome by the mysteries of death but shows a marked interest in its possible causes.

However, we would not suggest that the typical 7-year-old is a melancholy Dane who broods excessively on the paradoxes of life and death. He feels life in every limb. He draws his breath lightly as well as heavily. He likes to climb trees, to scuff, tussle and tumble, to play cops and robbers and commandos. He is careless about handkerchief, napkin and shoelaces. He has his active and silly spells as well as pensive moods.

And yet, in delineating a synthetic portrait of the 7-year-old it is necessary to re-emphasize the inner tensions which are the key to his psychology. He is preeminently in an assimilative stage, in which he develops a working balance between his inner propensities and the demands of the culture. He brings to the task a fund of native intelligence; but the task is not his alone. There are too many artificial and conflicting values in the culture. He is peculiarly in need of a discriminating guidance which does justice to the subtleties of his ruminative inner life. The 7-year-old is too readily misunderstood, too easily imposed upon.

He meets us, however, more than half way. He is susceptible to praise. He is sensitive to the point of tears to disapproval. Scolding and physical punishment are too gross for the tender tissue of his personality. His ethical sense is immature only because it is so recent. But in its processes, and even in its early patterns it suggests sensitivities which he will experience again in the years of adolescence.

MATURITY TRAITS

(The following maturity traits are not to be regarded as rigid norms nor as models. They simply illustrate the kinds of behavior—desirable or otherwise—which tend to occur at this age. Every child has an individual pattern of growth, unique to him. The behavior traits here outlined may be used to interpret his individuality and to consider the maturity level at which he is functioning.)

§ I. MOTOR CHARACTERISTICS

Bodily Activity

SEVEN appears less brisk than SIX but he has sudden spurts of very active behavior. A few children are more tensely active than they were at six, and at the other extreme a small number are far more inactive. The tensely active may show choreiform movements of the body.

SEVEN is more cautious in his approach to new performances. He shows a new awareness of heights and is cautious in climbing and when playing in a tree house.

He repeats a performance over and over to master it. He may have "runs" on one type of activity and then suddenly drop it for another. His interest in piano or dancing lessons has a strong motor component. His motor demands may be a real need but, as with other activities, he may lose his interest suddenly.

SEVEN exhibits extremes in his outdoor play. Sometimes he is tearing about, running and tossing a hand-made paper airplane; at other times he is content to hang around, talking, swapping cards or playing house.

Boys especially are interested in acquiring ability to use a bow and arrow, and to bat a ball, both of which skills require a new orientation to the side position.

Carpentry is a favorite occupation and SEVEN likes the tug and pull as he saws a board. Sawing may be preferred to hammering.

Girls are busy with jump rope and hop scotch, but they also find house play or picking flowers enjoyable.

A favorite posture, especially of boys, is to lie prone on the floor, resting on one elbow and activating the legs while reading, writing or working.

Eyes and Hands

SEVEN's posture is more tensed and more unilateral than that of SIX. He maintains a position for a longer period. He sits with head forward and tilted toward the non-dominant side which is the more tensed and closer to the body. He frequently drops his head down on his free arm as he writes or listens; in this position he may occlude one eye.

SEVEN is fond of pencils and erasers and now discards wax for pencil crayons. His grasp, though tight, releases suddenly, and he is apt to drop his pencil repeatedly while working.

He is interested in comparative size, and the height of his capital and of his small letters is becoming more uniform although they taper uniformly as he proceeds across a page. In drawing he represents his human figures in more accurate comparative size than formerly.

SEVEN is less distracted by peripheral movement than is SIX. He becomes absorbed with what he is doing and maintains regard within close range. He is still apt to touch anything he sees, and to manipulate it.

§ 2. PERSONAL HYGIENE

Eating

The 7-year-old eating patterns have many tag ends reminiscent of the 6-year-old patterns, but the child's relative improvement is summed up in a parent's remark: "He is less aggravating than he used to be."

Appetite. A few girls in our group still show low appetite; they enjoy their food in anticipation more than in reality. A few boys at the other extreme have tremendous appetites and are being kidded for being "fat boys." These boys are apt to voice abdominal discomfort, especially if they have eaten too fast or too much.

Refusals and Preferences. SEVEN expresses likes and dislikes, but not as strongly as at six. He is beginning to overcome his aversions by conscientiously eating disliked foods. This is difficult for him, but he makes the task easier for himself by dispatching the disliked food at the start or the end of the meal.

Self-Help. SEVEN handles his implements moderately well and is less apt to finger feed than formerly. He does find it difficult to get some foods on his spoon or fork without using his free fingers as a pusher. Some children will use a piece of toast as a pusher, others will use an actual implement called a pusher, but if given a choice, most would prefer to use their own fingers.

Table Behavior. SEVEN is more able to eat with the family. With his general calming down, he is now able to sit better, and may even show an interest in listening to table conversation, and in telling some of his own day's experiences. However, he is easily distracted by mention of anything that is going on outside, and frequently has to pop up from his chair to go to the window to see for himself. He often desires to bring to the table with him an object that has just engaged his interest, i.e. a gun or a comic book.

He is slow in coming to the table and usually has to be called a second time. He often chooses to eat by himself so that he can continue his reading or listening to the radio. If he is at the table with a younger sibling he may quarrel or become very silly to induce his sibling to laugh at him.

SEVEN does not dawdle as much as SIX. He is now more adept. He is again interested in dessert and can be motivated toward this end. He is also motivated to become a member of the Clean Plate Club to which the soldiers belong. But nothing motivates him quite as strongly as a friend waiting in the back yard for him to come out and play.

SEVEN still needs to be reminded to wash his hands before meals, and may resist with a "Do I have to?", which he overcomes himself if given time and no further pushing. He prefers his napkin beside his plate and actually uses it as needed. He is even equal to the nicety of wiping fingers and face inside the fold of his napkin. He remembers to wipe his face but frequently merely rubs the food particles from lips to cheek.

Sleeping

Bedtime. The hour of going to bed remains between 7 and 8 P.M. Some

SEVENS are able to get ready for bed by themselves, even bathing alone, but most like an in-and-out companionship of an adult with a few helps and reminders. Those who are independent enough to get ready for bed by themselves still want to call to mother or father to come and tuck them in and say goodnight. Some like to chat for awhile after lights are out, when they divulge secrets about what happened at school, if the parent promises not to tell the teacher.

It is instructive to note the calming effect bed has on these very children who feel jittery and realize that they cannot fall asleep readily. Some sing or talk to themselves as though they were carrying on a conversation between two people. Others listen attentively to catch the conversation of the adults, and to interpret the sounds of stirrings in the house.

Some children report that thoughts go round and round in their heads as though a phonograph record were telling about monsters, robbers and burglars. Reading or being read to helps to dispel these thoughts for a while. Some see funny pictures in imagery as they fall off to sleep, and others see odd shapes in reflections, shadows or the clothes hanging over a chair, interpreting these shapes as ghosts or spies. SEVEN may still want to take a personal treasure to bed with him, whether it be a gun, a panda, or an old bathrobe.

Night. SEVEN has a certain affection for his bed and may even grow sentimental about it. He is a good sleeper. Mothers report that the 7-year-old "Sleeps like a log," or that "Not even a siren wakes him."

Although he may have disquieting thoughts before he goes to sleep, nightmares are no longer common. Night toilet-

ing likewise has almost dropped out. Those who still get up, take care of themselves without waking their parents.

Morning. A common waking hour is at 7 A.M., which may fortunately stretch to 8 A.M. or later on Sunday mornings. SEVEN awakens by himself, and may even plan to awaken early in order to read or "to have more time." Like SIX, he may get dressed by himself, but he still needs considerable reminding.

Elimination

Bowel. Each child is fairly consistent with his own individual rhythm of functioning. After lunch or later afternoon are common times. Only a few are able to function easily at school. Typically, the 7-year-old can consciously "wait" until he reaches home. He expresses control in elimination as well as in many other functions.

Bladder. This is the age when a long span of retention is evident. The child may even have to be reminded to go to the bathroom before he goes to school in the morning, not having gone since the night before. He may put it off so long that he has to make a mad dash. Fewer children need to get up at night, and if they do, they take care of themselves completely.

For the most part there is not much awareness of and dwelling upon elimination functioning. A few express this in "silly" humor about urinating: "The King of France wet his pants."

Bath and Dressing

Bath. Some SEVENS still hate to bathe, but as a rule there is much less resistance than there was at six. SEVEN has difficulty in getting started, which is probably why his mother usually draws the water to get him going. When he is once in the tub he

enjoys it. He can wash himself fairly completely but for some the whole process is a bit of a chore. He needs checking up after a bath. He is apt to dawdle, to dream, or imaginatively to think that a bar of soap is a boat. This type of child needs considerable reminding and some help. Getting out of the tub when all is done usually is not difficult for him.

SEVEN is reasonably good about washing face and hands before meals if he hears his mother when she reminds him. The mother must make sure that he has heard, and need not be disturbed if his response is, "Do I have to?" for he carries out her request in spite of this protest.

Dressing and Care of Clothes. SEVEN is not a poor dresser after he once gets started. He has a great tendency to dawdle or to be distracted by things in his room or by thoughts in his head. With one sock on he may wander about asking about telephone wires, or how many states there are in the union. Some can snap to and concentrate by imagining that they are a fireman in action. Others are motivated best by accepting the father's direct help. If motivation is not secured, parents waste much energy in nagging and emotional tension. A very few children still need to be helped throughout the dressing. Parents can usually anticipate and plan toward self-dependence in another year.

A further difficulty in dressing, besides the need to tuck in loose ends, is the tying of shoelaces. The 7-year-old can tie his shoelaces tightly, but he usually goes around with them untied. It is the old difficulty of "he can but he doesn't." Therefore it is wise to demand a little of him, but not too much. A good plan is to provide him with long enough shoelaces so that he can tie a double knot. He can be made responsible for the first tying in

the morning, and then he needs help the rest of the day, if his laces come untied or he has taken off his shoes and wants to put them back on again. As with the 6-year-old, many SEVENS would prefer to take their shoes off the minute they enter the house.

Many 7-year-olds are not much interested in clothes. They like to wear old clothes, hate to change to new clothes, and girls like to wear the same dress for a number of days in succession. Their pet aversion is an innocent little handkerchief. (But they will accept a discardable tissue.) Very few demand to choose their clothes; they generally accept what the mother has laid out for them.

The 7-year-old is apt to "hang his clothes on the floor," dropping them on the spot. With reminding he will put them on a chair, but would prefer to have his mother do so. She too may so prefer; otherwise she will have to unscramble a bunched assembly of clothes which he has deposited on the chair.

Rips in clothes are common at this age and are usually not reported unless glaringly evident. Some girls like to shine their shoes (especially if they belong to a Brownie troop).

Boys are becoming more interested in combing their own hair, and girls make a fair attempt if they do not have braids. Activity diversions similar to those used at six during hair braiding may be used at seven and later.

Health and Somatic Complaints

Life smooths out at seven; is more reasonable and more understandable to the adult. SEVEN still has a fair share of muscular pains and other difficulties such as he had at six, but these are more obviously related to specific situations and can be more readily brought under con-

trol. SEVEN may still complain of muscular pains, especially knee pains, but these are quickly alleviated with rubbing and may even disappear miraculously if the child goes to bed.

He has fewer colds than he had at six. These are less severe and less apt to develop complications. Of the communicable diseases, German measles and mumps are the most common. Chicken-pox and measles also occur frequently.

SEVEN is more articulate in his complaints than he was at six, and his complaints still have validity. He frequently complains about being tired in general, especially at the close of an afternoon school session. He becomes tired rapidly when asked to do something. Stomach ache in relation to school is less frequent. It occurs more often after a heavy meal or before a bowel movement. He is more apt to complain of a headache at seven than he was at six, particularly after too much excitement.

Congestion of the mucous membrane, also noted at six, may occasion the violent rubbing of the eyes at six-and-a-half to seven years of age. Judicious eye wash or drops may alleviate the itching and reduce the rubbing, and thus prevent a possible infection of a tear duct. These symptoms may denote that too much is being demanded of the eyes. Such children should be treated more as 6-year-olds than as 7-year-olds.

A common complaint on the part of the mother is that the child is deaf. But on examination he is found to have good hearing, perhaps even better than he previously had. The apparent deafness is relative to his attention. He hears if he attends, but since he is so deeply engrossed in his activities, he does not readily shift his attention. He will respond better to the signal of a bell, a marked

change in the mother's tone of voice, a whisper, a magic word or a whistle.

Tensional Outlets

Being busy with his own activities and inner thoughts, SEVEN has life under more control. He does less facial grimacing because he has "more control of his facial muscles." He returns to nose picking and nail biting especially with a cold or an illness. He may not stutter unless the stimulus is a strong one, as a house suddenly catching on fire. If he returns to sucking his thumb—and this may happen especially with a few boys—he himself wants to stop and to have help in devising ways to control this habit. A subtle cue such as the mere mention of the child's name may suffice to remind him to take thumb out of mouth. A better method may be to set up a goal or a nightly reward (as five cents) for successful control. Having the money to buy one's own aviation cap is more of a stimulus than just working toward an aviation cap.

SEVEN tends to wiggle his loose teeth and to fidget. He may still cling to some of his sleep-inducing stuffed animals or blanket, but he now can give them up rather readily under some new strong stimulus such as a favorite relative who spends the week-end at his home. Having given them up for the week-end he may well be able to give them up for good.

§3. EMOTIONAL EXPRESSION

By six-and-a-half to seven years of age the child's life takes on a more serious, a more thoughtful tone. He is more inhibited, more controlled and more aware of other people and of his relationships to them. He may have been worried about heaven and dying at six, or about his

mother's welfare and the danger that she might be struck by lightning or locked up in the bathroom. By six-and-a-half, the father's health may be on the child's mind, or the children at school; but by seven, he himself is his own chief concern. He worries that second grade will be too hard for him. If he hiccoughs repeatedly he is fearful that he will die; or if he rubs his eye persistently he fears that something is going to happen to his eyeball (yet he cannot stop rubbing). He is beginning to be able to put himself in the other person's place, or more truly to put the other person's experience into himself. That is why he is so moved by sad stories, radio programs or movies. Some of his tall tales about his adventures turn out to be true happenings to another child which also have reality for him. Otherwise they would not have evoked a response so vivid.

SEVEN has an initial tendency to withdraw from situations rather than to stay and resist, as SIX does. By this withdrawal, SEVEN is protective of himself. He puts his hands over his ears to keep out loud noises. He actually does not attend enough to hear his mother when she calls him—though he may hear her if she shouts, whispers or changes her usual approach in some way. When asked questions he will often say, "I don't know" or "We haven't had that yet." When asked to do something he may say that he is too tired or that he doesn't "feel like it." He lacks confidence to the point of not wanting even to try.

Though he may attack his mother with a "You're mean," when he is scolded by her or when he gets into some difficulty with her, he is more likely to go off and sulk or to rush to his room and slam the door. If things do not go right in his play with his friends he may prefer to play

by himself, or may stalk off the scene saying, "I'm quittin'." And if things are not going his way at home, he may say, "No one treats me right. I'm going to run away." He may go as far as to pack his bag and actually go out of the front door, but usually he does not get beyond the front steps or a few houses up the street. A few SEVENS who seem to be fearful of life in general are actually reluctant to grow up. They withdraw from the new demands growth puts upon them.

SEVEN still has his moments of resistance,—his "bad spells"—but these are not simply for the sake of resistance. He may say, "Just try and make me," but more often he seeks a reason, "Why do I have to?" If he has caused a scene over some demand which the parent has pushed through, he thinks it over afterwards and wonders why he was so "foolish." His anger is often directed against himself for his actions. He is apt to throw a book if he cannot read it, or to break something if he has hurt himself. He may throw stones at other children as he is leaving a scene of action, but he rarely attacks his parent any more. He has attained more effective re-stabilizing mechanisms within himself. If some form of discipline is applied he usually accepts it though grudgingly. It troubles him very deeply to be sent to his room or to have to go to bed early.

If he cries, his reasons are more subjective than formerly. He is disappointed because some gadget of his doesn't work, or because what he was doing did not come out well. He cries because he thinks people don't like him. Although he is better at losing than he formerly was, he likes to win in the end. If life is stacked too much against him, he finally bursts into tears. He also cries when he is physically hurt. Usually he tries to control his

crying, especially if he is afraid someone will see him. He may even control it so completely that he merely says, "I feel like crying."

Although he cries less, he screeches more. The general noisiness and gross motor effervescence of the 6-year-old have been superseded by high pitched vocalizations, yells and occasionally unearthly screams. The 7-year-old shouts his replies to his mother; he shouts his criticisms of life in general with a "That's not fair!" He voices his exuberance in the same high-pitched manner.

SEVEN's chief interpersonal difficulties are with his siblings and with other children. He fights and contradicts, but can be motivated toward self-restraint by the prospect of a reward for better conduct. Planned separation and more opportunity for outdoor play may help him to attain his goal.

SEVEN sets up too high goals for himself. He wants to be perfect, he brings home only his "100" papers. He is deeply concerned about and even ashamed of his mistakes. He may not take correction well, and tries to cover up his errors with "That's what I meant," or "I was just going to."

Though SEVEN has difficulty in starting things, once started he is too persistent, too avid; he must finish, but he does not know when to stop. His mind "wanders on and on." If he is unskillful with his hands but facile in speech, he shows great dependence on conversation; he feels the need of someone to talk to and he talks all day long. He wakes up talking, cannot stop thinking, and persists in asking innumerable questions to support his thinking.

SEVEN is conscientious. He takes his responsibilities seriously even though at times he is not quite sure what he is

responsible for. He likes to plan his day—what he is going to do; and may enjoy using a chart as a guide to his goal. He is beginning to be thoughtful, to be considerate and is anxious to please. He is less selfish; can share better. He wants and tries to be good. He wants to find his place in the family group. He expresses his awareness of himself and his family in pride. He is proud of his abilities, his being good, and of his possessions, home and family. This awareness also makes him more critical of himself. Some SEVENS can even laugh at themselves; or when they are unable to go to sleep may say, "I don't know what's the matter with me."

Although life is fairly much under SEVEN's control, he is now sensing forces outside himself such as "good luck" and "bad luck" and in general he is inclined to think that he has all the "bad luck." Magic also is looming up as a fascinating unknown. He may imagine a vehicle that transports him home from school when he is tired; he may imagine a musical instrument that plays wonderful music.

§4. FEARS AND DREAMS

Fears

SEVEN's fears focalize upon himself,—his inner self,—and his self acting on its own. He has his behavior equipment so much better in hand that he can protect himself as the 6-year-old cannot. Six jumps right in and finds himself over his depth; SEVEN hesitates before acting. His fears and worries are to some extent useful in that they are self-protective.

Although SEVEN has some left-over fears which were not resolved at six, he now handles them differently. He may still want his parents to stay at home in the evening, but he can resign himself to

their departure, once he has gotten over the first hurdle.

SEVEN is spoken of both as cowardly and brave. These words refer to the lack of or presence of an inner control. Seven is an age when the environment can capitalize on the child's bravery, but bravery also needs environmental support and cannot be left on its own until the child is off to a good start.

Many previously unresolved fears now resolve,—the fear of the dentist's chair, the fear of swimming with face under water, or the fear of having hair washed. The 7-year-old has all of these situations under better control. He knows what the dentist does and that he can lift his hand if being hurt. He can now hold his breath under water and no longer "breathes in" as he used to do. He may be able to wash his own hair and can control soap in his eyes and the temperature of the water on his scalp.

But there are a number of situations that SEVEN does not have under his control. He does not want to experience new situations by himself. Even his summer may have been miserable because he was afraid to start second grade. He is afraid of his school work because he doesn't know how to start. He is afraid of being shy, or of being laughed at. He is afraid of physical punishment. And he may even be afraid that his mother will "get down on him" as his teacher has.

Space and time are taking on new meaning for him. He may fear high places and unfamiliar visual impressions. Cellars become inhabited by strange creatures and attics by ghosts. Even his own closet may have a German spy in it. Shadows gather form and take on meaning. His clothes on the back of a chair may suddenly appear as a frightening ghost in a half light after he is in bed. He may be

timid of his own shadow in his inability to interpret it and its sudden movements. Though he loves hut-play with his gang, he may be scared to death of the trap door in the hut.

SEVEN can, however, help to control his fears. He gets his sister to go down into the cellar with him and politely says "Ladies first." He flashes his flashlight on the German spy in his closet and dissolves him. He calls to his mother to analyze the ghost in his room and enjoys the realization that it was only his clothes on a chair.

The very child who is most fearful of being late for school at seven may actually never have had the experience of being late. He is usually the type of child who has his inner timing mechanism under poor control. He not only has difficulty in stopping—he goes on endlessly—but he also has difficulty in starting. It is an unsettling experience to be with a 7-year-old who is extremely afraid of being late for school. He may awake at 6 A.M. and shout to his parents, "Is it time to get up yet?" This phrase recurs at intervals. The setting of an alarm may help him temporarily to control his anxiety.

Once he is up he hurries into his clothes, rushes through breakfast and then waits. Again he plagues his parents with another oft-repeated phrase: "Is it time to go yet?" Even the assurance that his father will drive him to school may not allay his anxiety. During the last ten minutes before departure his whole body is aquiver with anxiety, he has to go to the bathroom at least three times and may even have a bowel movement. Finally he rushes off in the car, rushes across the playground and at last crosses the threshold of his room and experiences immediate calm. He gives his teacher no inkling of what he has gone through in the last two and a half hours.

This type of child under the best of handling may still express some anxiety, but he can be helped to better control. In the first place he should not be held to coming to school exactly on time, for his sense of time is still only relative and his coming to school should also include a certain relativeness. If the school cannot provide this type of handling, he should be helped to bridge the gap from home to school by one of his interests. Reading a book on electricity may turn the trick, especially during the last ten minutes before starting off for school. Then he might take the book to school, show it to his teacher, and it may be hoped that the teacher will respond with interest.

As with Six, certain stimuli in funny books or movies may bring on fears,—such tales as opening drawers and finding skulls. This is why the child still needs considerable supervision, especially if he is the type of child who is not too self-protective and who gets into situations from which he cannot get out by himself.

Dreams

Dreams are diminishing at seven or at least are not reported as much as earlier. Nightmares and dreams about animals are also declining. Only a few children have unpleasant dreams about being chased by persons or beasts.

SEVEN dreams mostly about himself. He has wonderful dreams when he flies and floats through the air, or dives into the depths of the ocean. He may dream of embarrassing situations such as wetting the bed (which may coincide with an actual episode of wetting), or losing his pants on the way to the school bus. A clearly defined shift to the opposite sex may be experienced in a dream. A boy may dream that he is going upstairs with-

out any clothes on and that his nipples have become extraordinarily large.

SEVEN carries on long conversations in his dreams, with spies, pilots and unfamiliar people. As he talks out loud one gathers bits of conversation which disclose that he feels himself to be definitely involved. He may say: "It's me," or "I don't think you need a bodyguard."

Certain movies and radio programs give him bad dreams. He still needs considerable supervision in making his choices of radio and movies.

§ 5. SELF AND SEX

Self

SEVEN is becoming more aware of himself. By absorbing impressions from what he sees, hears, reads, and by working things over in his own thoughts and feelings, he seems to be strengthening and building up his sense of self. At EIGHT he may take his equipment out into the outside world and try it against the environment, but at seven—for all his noisy slapdash exterior, his running through the house slamming doors and shouting—he most characteristically sits quietly by himself, reading, listening to the radio, planning about what he is going to do.

With some SEVENS, self-awareness relates strongly to the physical self. SEVEN is aware of his body and is sensitive about exposing it, especially to the opposite sex. He may refuse to go to the toilet at school if there is no door on it. He does not like to be touched. Girls are especially aware of the style in which their hair is worn, and actually may fear that their identity would be lost or at least that they might not be recognized if their braids were cut off.

Most SEVENS are concerned about their actions. They are ashamed of their mis-

takes and their fears, and very much ashamed to be seen crying. They are very much aware of what others might think, and are careful not to expose themselves to criticism. They cringe when they are laughed at or made fun of.

One of the ways in which SEVEN protects himself best is to withdraw from any scene of action which does not please him. His withdrawal may be combined with a distaste for physical combat. This is not the age to teach the child to "defend himself" by means of boxing lessons. By eight he may spontaneously defend himself. At seven he needs to be helped to withdraw and needs to be protected.

SEVEN is serious about himself, and about any responsibilities which may be given to him—especially if they are school or other responsibilities outside his home. He thinks and speaks seriously of such concepts as government, civilization and the like. SEVEN is not only serious but he also is cautious,—in physical activities, in social situations and in his approach to a new task. There are beginnings of slight skepticism about Santa Claus, about religion and other matters of which he has been told but which he has not experienced at first hand.

Though he withdraws successfully, he is apt to voice many complaints. He feels that people are mean and unfair. And as he thinks situations over he worries about what people think of him and fears that they do not like him, or do not think he has done well. He is particularly interested in what his mother and his friends think of him. "Of course the kids will make fun of me," he says. There is a definite minor strain in the feelings of the 7-year-old.

Boys especially may be breaking away from their mother's domination. They may refuse to wear coats, hats, rubbers.

They may ask, "Why should I?" if given a command, and may counter a direction with the response, "I don't feel like it."

SEVEN wants to make a place for himself. This place may be a physical one—his place at the table, in the family car, or a room of his own. But SEVEN is also interested in his place in the social world. He usually has strong family feelings and at the same time he may fear that he does not really belong to his family, that he has been adopted. SEVEN mulls all these things over in his mind, for even in his thoughts he withdraws. Then he may discuss the fruit of his thought with the adult in relation to such topics as: "The disadvantages of being over five and under sixteen." The particular 7-year-old in question advanced the following reasoning. "Under five people give you plenty of money, and over sixteen you have plenty of your own. But between those ages they make you work for your money and give you very little for what you do. And between those ages you are changing the fastest, so you need a great many things."

Sex

SEVEN is less likely than SIX to be involved in overt sex play. In fact, he may even withdraw from any possible exposure when he is undressing or going to the bathroom if a younger sibling of the opposite sex is near. If two girls expose themselves, one to the other, they may become interested in the details of the organs and even try to draw what they have seen. A few SEVENS, especially boys, may think that they can magically change themselves into girls by taping up their genitals. These same boys may enjoy playing dolls with a girl.

SEVEN's real interest is in *thinking about* all these things. He shows an intense

longing to have a new baby in his family, and almost always he desires a baby of his own sex. One such child, reminded a year later of her 7-year-old desire which was about to be fulfilled, exclaimed, "Now whatever made me say that!" SEVEN realizes that having babies can be repeated. He may ask his mother how many more babies she has in her stomach. He is aware that older women do not still have babies. He may even draw up a plan for his mother to have a baby every five years (because this is the easiest for him to calculate) until she is sixty when he feels she won't be able to have any more.

Pregnancy is now something that he is beginning to understand. He may be the first to notice that his mother is different. He may ask, "What's the matter with you? You don't act the same." If a baby is coming in his home he is very much excited about it. If permitted the experience, he is thrilled to feel the kicking of the baby against the mother's abdominal wall. He wants to know how big the baby is, how it is fed, will it get sick if the mother becomes ill, and how long it takes before it is ready to be born.

He does not quite understand how the mother knows that the baby has started growing. He is satisfied when he learns that two seeds (or two eggs), one from the father and one from the mother come together to start the baby. He is not yet concerned about how the seed from the father got into the mother.

He is more concerned about the details of birth. In his own mind he may more or less vaguely figure out that you have to "split the mother open to take the baby out." He readily accepts the simplified statement that the baby is born between the mother's legs. He wonders whether this takes place with the mother on the floor or on a table, and whether the baby

might fall to the floor. He may even ask to be there so that he can catch the baby when it comes out. It is no wonder that he cannot understand why a baby should cost so much when it grows inside of a person.

SEVEN may himself become involved in an elementary love affair. Boy-girl pairs are fairly common, especially at school. The boys who can write and spell may even write simple notes, "Do you like me? Yes or no." With X's for kisses. If the relationship progresses to a specific "engagement" and even to a planned marriage, the boy usually adds that he plans to return to his mother's house after the marriage. The loss of a boy-friend or girl-friend is usually taken as a matter of course, but some SEVENS are more deeply affected. One 7-year-old who did not have a boy-friend waited to her parents, "What is the matter with me? I'm not in love."

§6. INTERPERSONAL RELATIONS

SEVEN is becoming a real member of the family group, ready to take some of the household responsibilities. Many SEVENS like to help and often take on certain routine chores, especially on Saturday mornings when they like to empty wastebaskets or garbage pails, fill the potato basket, cut the lawn, make their bed, pick up their room, help with the dishes, prepare the vegetables, run errands. Sometimes this help is spotty. SEVEN also tires of one chore and wishes to shift to another. Although the 7-year-old talks about earning money, he is really as interested in doing the work as he is in receiving money for it. Money does not motivate him as much as it may at eight.

SEVEN is less resistant and stubborn than he was earlier. His mother speaks of him as being more easily controlled and

influenced. He has lost his 6-year-old freshness and is even polite, sympathetic and capable of genuine affection. His chief trouble comes when he is interrupted in what he is doing whether he be playing outside or reading a book. You can plan with him, however, as to if and how he should be warned, and when and how he will be called.

SEVEN not only gets on well with his mother, for the most part, but he is becoming extremely companionable with his father. Boys especially like to go on long walks with their fathers and like to have long discussions with them about such masculine matters as sinking oil wells. Girls are more sensitive to any reprimand from their fathers and may be jealous of any attention he shows their mothers.

A few SEVENS have real difficulty in adjusting to either parent or home and wish to bolt from a trying situation. As one girl put it, "I don't want to be a member of this family. I'd like to go away!" Or the child may get the notion that he does not actually belong to this family, that his mother and father are not his real parents. Nevertheless he is proud of his home and of his family and often compares them favorably to the homes and families of his friends.

SEVEN wants to make a place for himself in the family group, especially if there is another sibling in the family. If he has been sharing a room with a sibling he may now prefer a room of his own. He is usually very fond of a younger sibling especially if the sibling is a baby. Then he assumes the part of the big brother or sister, wants to carry him, feed him his bottle or wheel him in the carriage. If his younger sibling is closer in age, he may play well with him, look after and protect him, particularly if a third child is not added to the group. But frequently

he is apt to tease, poke, bicker with and fight with his younger sibling. Separation is then indicated. SEVEN is inclined toward jealousy of a sibling and worries that the sibling may put something over on him, or have more privileges. SEVEN admires an older sibling, and is often under the older sibling's influence—which may not always be for the best.

SEVEN does not demand companionship as much as he did at six. He spends considerable time by himself listening to radio programs, writing lists of things, bouncing a ball, or in other solitary activities. As a rule he plays fairly well with other children. SEVEN often has a gorgeous, silly time with playmates of his own age. Some SEVENS play better at home, others play better away from home. Indoor play is more often too stimulating and may make SEVEN act pretty wild. Usually, however, SEVEN holds up better than SIX, though he is likely to walk out on his playmates if things go too badly, or to start a fight. Some SEVENS still will not fight and may hide their fearfulness behind "big talk."

Several children are likely to gang up against some other child, and many 7-year-old boys have trouble with older boys who bully them. Group play is not well organized and is still carried out mostly for individual ends. The individual child may worry about his place in the group and fear that he cannot hold his own or that others do not like him, and he particularly does not want "the other kids to laugh at him." There is usually less direct physical and verbal attack on playmates than at six, although boys indulge in a good deal of half-friendly, half-unfriendly wrestling and scuffling.

Sex lines are not clearly drawn but some discrimination against the opposite

sex is beginning to appear. Boys cannot be bothered with girls, and girls do not think boys are very well behaved. But the opposite sex is still invited to birthday parties and boy-girl friendships suggest rudimentary love affairs.

SEVEN is becoming more adept in meeting strangers. He is now able to greet them. He likes to listen to an older group's conversation and he likes to go visiting. A more inept or immature SEVEN may be very much aware of other people and yet be unable to greet them with ease, is apt to push them, rush in front of them, stumble over them, throw a ball treacherously near their noses, contacting them awkwardly in all the wrong ways. Such an awkward SEVEN is greatly benefitted if he receives more complete and personal attention from one of the visiting guests.

§7. PLAY AND PASTIMES

In General

SEVEN is inclined to be obsessive in his play interests. He is said to have a "mania" for guns, funny books and coloring. He can spend hours at whatever he is doing, whether it is playing the piano, jumping rope, reading, or working at his work bench. SEVEN has more capacity to play by himself than he did earlier, and therefore can more readily hold to a task without having to adjust to other people's ideas.

SEVEN does not branch out on many novel ventures. But he is better at planning what he is going to do. Boys now have some comprehension of a model and a blue print. They are inclined to do a little inventing of their own and they like to rig up things, utilizing cereal boxes, electrical wire equipment, and odds and ends. They like to make and to "shoot"

paper airplanes as darts. Girls may be inventive in designing dresses for their paper dolls.

There is a strong return to coloring and to cutting things out. Some girls cut out paper dolls endlessly and are content with simply putting the dresses on and off after the cutting. Quantity is the rule in whatever collecting SEVEN may undertake whether it be stones or bottle tops. Outdoors, girls favor hop scotch, jump rope and roller skating; boys enjoy tops and marbles.

In his gross motor activities SEVEN is fairly cautious but not fearful. He has become an expert tree climber. Many SEVENS own bicycles and ride them well but are not yet capable of handling them responsibly off the sidewalk.

SEVEN is really learning to swim. He is a better batter at ball play than he is a catcher. The side stance of bow and arrow play, as well as the cautious release of the arrow seems to appeal to him. He has the physical stamina to hold up better during the winter season and is beginning to enjoy sliding, skating and even skiing.

His group play is similar in type to that of SIX, with less ability to pretend and more ability to provide the necessary paraphernalia. He demands more realism. For example, when library is played, he must have library slips and go through the whole formal procedure of lending out books. He equips his tent with a cot, table and chair, writing material and a gun. Guns are a prominent feature of his group games. He may become so noisy with his persistent sound of firing that his gun play may need to be restricted to out-of-doors.

SEVEN is fond of table games and of jigsaw puzzles. He can handle games better because he is not quite so intent on win-

ning as he was earlier. He will even tackle such complicated games as Monopoly. Magic and "tricks" are greatly favored.

There are marked individual differences in play pursuits, dependent upon talents and temperament. Some boys make simple but serious beginnings in chemistry, telegraphy, and navigation.

Questioned as to their favorite play activities, SEVENS most frequently mention climbing trees, riding bicycles, playing cars. One 7-year old boy, however, succinctly said, "Color. Everything else stinks."

Reading

Many SEVENS are fair readers and enjoy reading what they can by themselves. They can get the sense of a story without knowing all of the words. Some SEVENS are even spoken of as "chain readers" for they move directly from one book to another. SEVEN enjoys fairy tales even though he might be said to prefer his funny books. Boys especially are interested in army and navy stories, and books on airplanes, electricity, earth and nature. Girls choose such books as Heidi or the A. A. Milne books. SEVEN is not read to as much as formerly, since he is less demanding, and more preoccupied with his own reading and his spontaneous listening to the radio.

Music, Radio, Movies

SEVEN often may express a strong desire to take piano lessons. The question may be asked whether this craving should be satisfied. It probably is desirable to satisfy this demand if the music teacher will allow the child to take lessons without practicing, which is often the preferred way to learn. Too many home battles are fought over piano practicing before the child is really equal to practicing by himself (nine to ten years).

The radio is now becoming part of the child's steady diet. The late afternoon programs of adventure and shooting are still favored. Some SEVENS are apt to branch out into news programs and mysteries which disturb them and also disturb their sleep. SEVEN needs to be protected from these programs since he is at times unable to judge for himself what he can take.

Interest in movies is variable with 7-year-olds. Musicals, dancing, singing and animal pictures are preferred. Love stories are very much disliked. SEVEN is likely to become overactive and to squeal during a performance. A few SEVENS like shooting pictures. Some attend weekly, but on the whole movies are not much enjoyed before eight years of age.

§8. SCHOOL LIFE

On the whole SEVEN accepts his return to school without protest but he may anticipate that second grade will be too hard. A few advance visits of the first grade group to the second grade room (i.e. a play or picnic at the end of the year) help to forestall and to alleviate such fear. SEVEN may fatigue in spells and this is noticeable at school as well as at home. He has fewer illnesses but an illness may be of longer duration.

The teacher plays an important part in SEVEN's adjustment. She becomes involved in a more personal relationship with each of her pupils and may be both liked and disliked. Boys are more apt to like their teacher and may form a close attachment to her. Girls may dislike and complain about her. SEVEN continues to bring things to the teacher but not as much as at six, nor does he bring things for the group. However, he enjoys an opportunity to display a new possession.

Home and school are more separated spheres at seven. The child may not like his mother to walk to school with him, or to visit school unless it is for a group performance when other mothers also are present. While he is with the group he may ignore her presence.

SEVEN likes to accumulate his papers in his school desk rather than take them home. If they are kept in a notebook he may wish to take this home on occasion. It would then be left at home if his mother did not remind him or put it in his hand as he leaves for school. He is apt also to leave sweaters and belongings at school unless the teacher helps him to remember them. SEVEN is not a good messenger either for teacher or for parent.

Interviews between parents and teachers may still be more useful than report cards. Two interviews a year may suffice for the majority of second-graders but in individual instances it is well for the parent and teacher to keep each other informed of any anxieties or fears in relation to the child's adjustments at school (fear of being late; fear of not completing work).

As SEVEN enters the classroom he does not always refer to his teacher; he may be noisy and talkative as he makes his entrance, manipulating objects about the room. However, he is interested in a schedule and finally settles into classroom work with absorption. He is quieter while he works than he was at six, talks more to himself. He refers to the work of his nearby neighbor, or makes an impatient demand for the teacher's assistance, often by going directly to her. He is frequently seen with head resting on his forearm while he writes and also while classroom discussions are in progress. He shows temporary fatigue with some tasks by shoving his desk, opening and closing his desk top

or getting up from his chair. These signs indicate that he is ready to change to a different activity.

"What comes next, Miss L?" is a typical remark. SEVEN makes abrupt shifts from one situation to the next. He becomes active and talkative. His voice may reach a penetrating, piercing pitch. He whistles or makes different noises and is soon joined by one child after another until the class is in an uproar. The teacher heeds this as a signal to change to a new activity.

SEVEN likes to manipulate objects, so he picks up pencils, erasers, sticks and stones and accumulates them in his desk. He may attempt to insert one object into another, and manipulates them so forcibly as to break them. It may be helpful to have an emptying of pockets at the end of a morning session, and an occasional desk cleaning day.

With SEVEN's motor manipulatory pressures, it is no wonder that carpentry is enjoyed especially by the boys. Although he builds more complicated structures than at six, he is less concerned about his product which is easily ignored or lost. He likes, however, to make a Christmas gift for one of his parents.

There is less interruption for toileting, as SEVEN has a longer retention span. The majority toilet before and after lunch and after rest period in the afternoon. A few very active boys may have a shorter span. SEVEN prefers the privacy provided by an enclosed toilet and may refuse to use the school toilet if it is without a door.

Classroom work requires the teacher nearby as she is in almost constant demand. There are many individual differences at seven. Some prefer work at their desks to work presented by the teacher on the blackboard and vice versa. (SEVEN does not combine the two easily; he can-

not copy from the blackboard.) Boys like oral better than written arithmetic and girls may prefer concrete to oral or written arithmetic. Some wish widely spaced ruled paper, others prefer narrow. Some respond immediately, others need to be allowed extra time. By eight there will be more uniformity within the group, but such differences need to be respected at seven.

In reading, SEVEN recognizes familiar words accurately and rapidly. He is more mechanical in his approach to reading; he reads without stopping for the end of a sentence or a paragraph though in his efforts he is apt to repeat a phrase. He may omit or add familiar simple words (*and, he, had, but*) or a final *s* or *y*. He hesitates on new words and prefers to have them supplied so that he can maintain his speed; or he may simply guess, using a word of similar appearance, often one with the beginning and ending letter the same, though the length of the word may now be shortened (*green* for *garden*, *betful* for *beautiful*). Substitutions of meaning (*the* for *a*, *was* for *lived*) are prevalent. Vowel errors (*pass* for *puss*, *some* for *same*) are common. Speed of reading, like other behaviors, shows individual variations.

SEVEN likes to know how far to read; he likes to know how many pages in the book. If he has left a story unfinished he may want to go back to the beginning.

As he improves in the mechanics of reading he may temporarily be less concerned about meaning. He is, however, critical of his reading material and may refuse to re-read certain stories. Some SEVENS become inveterate readers with a special liking for comics. (A favorite time for such reading is in the early morning before breakfast.)

SEVEN's ability to spell usually lags be-

hind his ability to read. He enjoys copying words but he still cannot spell them by heart. He becomes especially confused over vowels and is most apt to use the vowel *i* (*sit* for *sat*). This preference for *i* is also shown in his pronunciation (*cin* for *can*; *tin* for *ten*). Though he may dislike and refuse to spell whole words, he does enjoy naming the beginning and ending consonants of a word. Thus he grasps the sounds the letters make.

SEVEN likes oral arithmetic and cards with number combinations. He still reverses one or two numbers in writing (usually 2, 6, 7 or 9). He delights in writing long numbers. He likes to continue the same process on a page and he may be confused by shifting from addition to subtraction.

Pencils and erasers are almost a passion at seven. SEVEN writes to erase. He manipulates, fingers, drops his pencil and jabs it into his desk or into an object. He still reverses some letters and numbers but he usually recognizes his reversal and prefers to erase it. He may say, "Don't be surprised if you find one of my capital J's backward." His pencil grasp is tight with the index caved in and as a rule he exerts much pressure though this is variable. Several children ask to "write" rather than print; maintaining the pencil in contact with the paper may give them more security of motor control.

Pencil and paper work, although a strong interest, makes problems at this age. SEVEN may worry if he cannot finish his written work and even fears being kept after school if his paper is incomplete.

SEVEN has a new awareness of ends. "How far shall I go, Miss L?" "I can't finish," are typical remarks. He likes to complete but he wants the teacher to set his end for him, otherwise he is apt to

continue too long. He likes to have his paper corrected immediately. "Did I get 100?" "Is this right?" He does not compare this with others, but in drawing he may ask the teacher to evaluate who drew the best tree or the best horse.

The thoughtful, memory-rumination of the 7-year-old is shown in the following responses to a teacher's question: "*What do you see in your mind when you think of autumn?*"

"I see the leaves going zig-zag."

"I see them going down gently."

"I see pumpkins turning yellow."

"I see milk weeds turning brown."

"I see chestnuts falling down."

"I see the birds going south."

"I see the trees with pretty near all the leaves off."

SEVEN makes a characteristic "explosive" transition from schoolroom to playground at recess time; but on the playground he may be either more, or less, active than he is in the classroom. Entanglements with classmates occur even with the teacher nearby. One child may interfere with another's block structure, one child may want to remain on the swing for the entire period, or monopolize a ball or a jump rope. When several children attempt group play they may become excited and hilarious. This usually ends with destruction of material, or personal altercations. SEVEN needs a variety of outdoor equipment and even though he is not ready for any directed group play, adult supervision is essential. During the year some become interested in group play set up by the teacher as long as they are free to join and leave the group at will.

SEVEN wants a place in the group and may be concerned that the other children or the teacher do not like him. He can be separated from the group for special

help or to work or play by himself but he does not like to be singled out for reprimand or praise while he is a part of the group. Group praise, however, is a real spur. The group is slow to include a new member and may even make fun of him.

In play, four or five children may attempt to play together; to build, to shoot airplanes, to play commandoes, or simply to talk or wander about together. But there are usually several children who prefer solitary play on swing and jungle gym or play with jump-rope or ball.

§9. ETHICAL SENSE

SEVEN is becoming more responsive to the demands of his environment. For the most part he responds well to directions, especially if he has heard what was said to him. He does, however, forget readily and needs to be reminded. He often needs two chances. He may respond slowly or under protest, but this is reminiscent of the 6-year-old. If he is caught in a net of rigid perseveration he must be helped out of it to break its hold upon him.

SEVEN rarely needs punishment because he is a reasoning and by nature a responsible being. You can plan with him and thus avert disaster. Although he may still have some difficulty in making up his mind, especially when a demand is made of him, he is showing greater skill in making a decision. He now reasons with his parent, can compromise, and though he may still not wish to change his mind, he may change it when reasoned with. This reasoning with parents is often quite personal, and all of his sentences may begin with, "But mommy—."

SEVEN definitely wants to be good; although he wants to be himself, too. With some SEVENS it is not so much that they

are concerned about being good as that they *just are* good. They are proud of a good day and concerned about bad days. They feel sorry for younger children who spoil things by being bad, and they instruct their younger siblings about the disadvantages of being bad. Some SEVENS have good and bad spells which seem to come in cycles. They are good for a period, and then impossible. Unfortunately this type of child may suddenly turn "bad," even when he means to be "good."

SEVEN's idea of good and bad is beginning to be slightly abstract. It is no longer concerned solely with specific actions allowed or forbidden by his parent, but involves the beginnings of a generalized notion of goodness and badness. One 7-year-old reviewed her day and asked to have listed all the things she had done *Thinking About Myself* and all that she had done *Thinking About Others*.

Thinking About Others:

1. Telling Margie about a gun for Johnny.
2. Obeying my mother—picking up the living room.
3. Went to bed willingly—fell asleep quickly.
4. Remembered to close the door to keep the bathroom warm.
5. I didn't shout in the library.
6. Came off the ice very quickly when Anne came for me.
7. Put my glasses away in their case.
8. Put my glasses on when I'm reading.
9. Dressing quickly without dawdling.
10. I look before I cross the street.
11. I don't tip my chair as much as I used to.

Thinking About Myself:

1. Eating omelette with my fingers.
2. Saying "Wah!"
3. Speaking rudely to my mother: "Yes you will!"
4. Contradicting.
5. Not washing hands before playing the piano.

SEVEN is less likely than SIX to blame others. He may even act with heroism, when no punishment is involved. Rather than blaming, he may alibi in order to cover up any of his mistakes. He says, "Well, that was what I meant," "I was just going to." He is now aware of a force outside of his own control which is influencing him and which he calls "fairness" and "luck." Whenever he gets into trouble, he is likely to say, "That's not fair." Although he may still be a poor loser, he is improving because he realizes that losing along the way does not always mean that you will lose in the end. Winning is often a question of luck to him, not too much under his control. Sometimes he thinks he has "all the bad luck." One SEVEN expressed it this way: "Why do I always have the bad luck? Why do things so often happen to me? I might as well be dead." The bad luck in question was that it was time to go to bed.

SEVEN may be very conscientious about taking things. He may have no use for a stealer or a cheater. But when he is in the schoolroom, he seems to be in the midst of so many things he wants and can add easily to his desk's store of belongings. He sometimes acquires new things by the more orthodox method of exchanging his possessions with friends. This is usually conducted on the basis of an "even swap" and does not involve real trading.

SEVEN has an increasing sense of possession and of the care of his possessions. He is better about putting things away, he helps his mother pick up his room, or he makes a mad scramble to put it in order the last minute before it is time to go off to school. The 7-year-old is becoming very much interested in making collections—of such objects as postcards or boxtops. The goal at this age seems to be mere quantity, with slight regard for

formal arrangement or classification. He also likes to have a school-pouch or school-bag, and in this pouch he carries a veritable collection of pencils, erasers and rulers.

There is an increasing interest in money. He may be more anxious to earn money than to have an allowance. He is interested in buying specific things like a school magazine, a funny book, or war stamps. Sometimes he puts his money in the bank, which may be a means to saving part of the money for some specific object such as a bicycle or a typewriter. He is especially enchanted by the appearance of money in the toe of his slipper when he has left a tooth there. The money seems to him to be the proof that fairies do exist.

There is often considerably less lying at seven than in the years which precede and follow. However, SEVEN, with his rather strong ethical sense, may be very much concerned about the wrongness of lying and cheating. He is particularly concerned if this lying and cheating is done by his friends.

§ 10. PHILOSOPHIC OUTLOOK

Death and Deity

SEVEN is increasingly concerned about God's place in the world, even as he is concerned about his own place. If he is told that God lives in heaven, he wants to know where heaven is, how God got up there, does He use a ladder, does He live in a house. He wonders how God can see everything and be everywhere, and may answer his own questions in part by thinking that God must, for example, have a magic wand.

SEVEN may have lost his more personal feeling relationship to God and a certain skepticism about God comes in. As one

SEVEN explained, "I have never seen God." He may still wish to go to Sunday School, though many refuse, and he is either likely to refuse to say his prayers on occasion, or to do antics as he is saying them.

His concept of death is rather similar to that held by the 6-year-old but it is more detailed, realistic and more thoughtful. He is not yet capable of accepting death as a biological process; but is still chiefly interested in it in terms of a specific human experience. He worries less about his mother's dying, and now is beginning to realize that he himself will die some day, though he usually denies that this could happen.

Chief interest in death is given to funerals and their appurtenances and to burial rites. Children talk about funerals, coffins, graves, being buried. They also take a matter of fact interest in visiting cemeteries, looking at tombstones, and noting verses, names, dates and designs on the tombstones.

Understanding of the various possible causes of death is increasing. Death is no longer entirely blamed on acts of violence or aggression. Disease, old age, over-eating are considered as other possible causes.

Time and Space

The sense of Time is becoming more practical, detailed and sequential at seven. Most SEVENS, especially boys, can tell time by the clock both by hour and minutes, and SEVEN usually demands a wrist-watch of his own. SEVEN is aware of the passage of time as one event follows another. He is interested in planning his day. He also is aware of the passage of time from month to month and may ask in September how much longer it is before Christmas. He may know the sequence of months

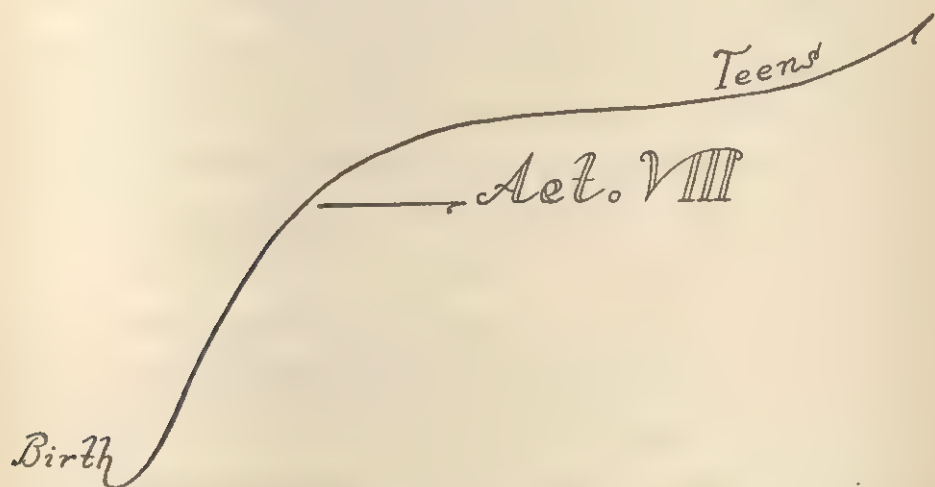
and of seasons. He may be even able to think in terms of years. One 7-year-old who was thinking ahead to the time when she would be sixteen commented, "It's a long time to wait. Nine years. And even one year is a long time. Longer than you think."

SEVEN is especially interested in space as affording him his place in the world. Even God has his place in heaven. SEVEN is especially interested in the various objects

in space—the earth's crust, stones, waterfalls and fire. He is also interested in the use of these elements—oil from the earth, power from water and heat from fire. He shows improved grasp of the points of the compass. He cannot yet distinguish right and left except in relation to his own body. He does not yet take an interest in the far places of the earth, but his interest in various parts of his community is definitely expanding.

8

EIGHT YEARS OLD



BEHAVIOR PROFILE

FOUR, you will recall, was an expansive age. FIVE was focal; SIX, dispersive; SEVEN, pensive. EIGHT again is expansive, but on a higher level of maturity. These adjectives are catchwords; but they serve to remind us of the accents of development and the spiralling trend of psychological growth. The 8-year-old is indeed an elaborated and an elaborating version of the 4-year-old. But we can understand him best by comparison with the traits of seven-year-oldness.

EIGHT is more of a person by adult standards and in terms of adult-child relationships. One converses with an 8-year-old with lessening condescension. He is growing up and both he and you are aware of it. He is governed by a growing-up impulsion which brings him into a positive outgoing contact with his environment, including his elders. He is less brooding and less inwardized than he was at seven. He is more centrifugal. He is also more rapid in his own responses, and more perceptive of the responses of others.

There are three traits which characterize the dynamics of his behavior: Speediness, Expansiveness, "Evaluativeness." The last named trait cannot be found in the dictionary, but it describes his dominant tendency to appraise what happens to him and what he causes to happen. He is spreading out into the culture, testing and applying the basic feelings of meaning which were built up in the previous year. There is a new vein of active curiosity; a mounting energy and a certain robustness which is different from the idyllic sweetness of earlier childhood. (Alice-in-Wonderland was seven. Alice-of-the Looking Glass was seven and one-half "exactly.")

Even in physical aspect the 8-year-old begins to look more mature. Subtle changes in body proportions already foretell the more marked changes which will come with pubescence. His eyes are now more ready to accommodate to both near and far distances.

EIGHT is in general healthier and less fatigable than SEVEN, more fond of rough and tumble play and boisterous games. His psycho-motor tempo is heightened. He tends to talk, to read and write and to practice his piano lesson in high gear. He bolts his food, sitting on the corner of his napkin, ready also to bolt outdoors, without pulling up his socks or tucking in his shirt. He may add a little bravado to his slap-dash demeanor to emphasize his masculine toughness.

Although we shall continue to use the pronoun "he" in a generic sense, the foregoing characterization applies more particularly to boys. At the age of eight we reach a maturity level where the two sexes are drawing somewhat apart. Boys on occasion like to herd up and to shout

derision at a corresponding group of girls. The spontaneous segregation is not consistent nor prolonged, but it is symptomatic of the developmental forces which are steadily bringing boys and girls toward adolescence and adulthood.

Not without reason, therefore, does the 8-year-old listen closely when adults talk among themselves. He watches their facial expressions; he keeps looking and listening for cues and indicators in the social environment. He recognizes the gap between the world of the adult and his own world and adjusts accordingly. He is not naively docile and compliant. Somewhat consciously he shapes and establishes his own position in the circles at home and at school. He is a little sensitive about being told too directly what to do. He prefers a cue or hint. He expects and asks for praise: "This isn't good, is it?" But he does not want to be joked about his shortcomings. His sense of self is becoming a sense of status and he is constantly re-defining his status relationships with comrades, sibs and elders.

The relationships with mother and with teacher reflect the complexity of these interpersonal behavior patterns. Boys and girls alike tend to show strong admiration for their parents, expressing affection in action and words. Both sexes are susceptible to jealousy, particularly in their attachment to the mother. Mothers report that at the age of eight the child is voraciously demanding of maternal attention. "He (or she) haunts me, always wanting to walk or to play or to plan with me." This relationship reflects a growth mechanism. Earlier the child mainly wanted his mother's physical presence. Now he wants a closer communion, a psychological interchange, whereby he penetrates deeper into adult life and at the same time achieves increasing detachment from parental and domestic dominations.

At school he has already attained a large measure of detachment. He is not as dependent upon the teacher as he formerly was. The teacher is, in fact, less important and less involved in his emotional life than she was at the age of seven. She figures more as a beneficent potentate and regulator. To a considerable degree he and his schoolmates are begin-

ning to furnish some of their own discipline, and to control their own activity through mutual criticism and assignments of responsibility. He is definitely conscious of the school group as a group to which he belongs and to which he owes something. Teacher does not have to circulate so much to lend her personal support.

However, the 8-year-old is only at the beginning of well coordinated and sustained group activity. His spontaneous club organizations are sketchy and short-lived. The concept of ballot and franchise is beyond him. He does not grasp complex rules. His ball games are far from orthodox, and often depend upon improvised spot rules. There is much bickering, dickering and disputation; but the play goes on. Let the 7-year-old secede with his "I'm quitting!" The 8-year-olds generally muddle through, albeit noisily and not altogether without murmurous disgruntlement. Their wrangling is often highly educational.

Be it noted here that we cannot profitably discuss cooperation, loyalty, sportsmanship and comparable virtues in the abstract. These virtues, to be sure, are primarily determined by general maturity factors, but they are finally manifested in specific attitudes which are patterned through numberless experiences in concrete situations at home and school and on the street. Through such acculturation the 8-year-old is steadily acquiring social aptitudes and social insights.

By the same token he is building up an ethical sense, which consists of an intricate aggregate of attitudes. When he was only a year-and-a-half-old he had certain simple feelings of shame. Now he is capable of experiencing this feeling in numerous situations. He can say contritely, "I will never do it again." He has a lively property sense, reinforced by his own urge to make collections, and by his intense interest in money. He has a growing aversion to falsehood. When he tells tall tales they usually have a grain of truth. He has a germinal sense of justice, based on a regard for "rules" and precedents. This causes him to impute unfairness in others. Frequently he criticizes his sibs severely. He can admit his wrong-doing; but he softens the admission with strong alibiing, which itself denotes an evaluation of ethical issues. The alibiing is

not so much to shift the blame, as to indicate why under these particular circumstances he did not do what he himself would ordinarily have done! The very refinement of his explanations reveals the complexity of the anatomy of rectitude.

His feelings are easily hurt, particularly when his emotional relationships with his mother are involved. He is sensitive to criticism whether actual or implied. He looks for the approval of her smile and readily misconstrues her silences and her comments. This is because he has a well-defined image of how he wants her to react in relation to him. He includes her response as well as his own in the total relationship. Tears well up on slight provocation. His mother's passing frown may precipitate a sunshower cry. She often inadvertently treads on the tender toes of his expectations. But he is not given to prolonged moods of depression, and actively seeks reconciliation. On the playground among his equals he displays a more robust capacity to take and to give criticism. He is learning to lose. He likes to challenge himself. With his abounding energy he enjoys life despite the adult inhibitions which he is trying to interpret and to master.

Inhibitions and limitations set by schoolmates and playmates, he accepts with increasing reasonableness. He shows a significant readiness to join with three or four companions in setting up a lemonade booth or a roadside stand, with business conducted on a cash basis. There may be conflicts of managerial authority but the enterprise is carried through. Likewise, 8-year-old boys and girls are able to plan and to present with spontaneous flow fairly complete dramatic renderings, historical and otherwise.

This dramatic interest has a double significance. It evidences two of the cardinal traits of the 8-year-old: "evaluativeness" and expansiveness. His ego has a new degree of flexibility; by impersonation he can assume one role after another, *appraising* each role in terms of how he would or ought to feel under the required circumstances. A less mature mind merely mimics roles without this evaluative inflection. Because he is by nature expansive the 8-year-old likes to put on public shows, and to

embark in private imaginative expeditions; he is under a compulsion to *spread himself* into the culture.

As a hungry amoeba thrusts out one pseudopod after another, the hungry 8-year-old mind actively spreads into new territory. This expansive propensity reveals itself in the contents of a boy's pocket or of a girl's satchel. It reveals itself in the collections and trophies stored in treasure box, drawer, desk and school-bag. A mail-order catalogue becomes a magic carpet. The 8-year-old delights in poring over its encyclopedic illustrations, choosing now this, now that item as an imaged extension of his personality. "If I had that, O boy, wouldn't I *do* this and that!" Thus he invades both reality and unreality. But each article has a published price; and he has a limiting money allowance. He could spend only so much, no more. This helps to organize his thinking. Everything in the world has a purchase price! If the 8-year-old also has an intense desire for unlimited money, it is not from pure avarice alone. He likes to barter. When he swaps equivalents he makes a fair trade. When he gets out of his field he can strike some very poor bargains. We have also heard of an 8-year-old girl who became something of a Lady Bountiful in sharing her mother's cosmetic supplies with neighborhood friends. All of which suggests that money, property, ownership and possessiveness are of extreme importance in the cultural organization of the childhood mind. One may well wonder whether the early property complexes are not as consequential in their dynamics as the complexes of juvenile sex life.

Psychological differentiations in the field of sex, however, are taking form during this developmental period. Boys and girls participate as equals in school and recreational activities. They share many interests; but they are also becoming vividly aware of distinctions which separate them. The expansive trends may lead to experimentations, homosexual and heterosexual. The divisive trends lead to withdrawal and to self-conscious unwillingness to touch each other even in ordinary play. The expansive trends also lead to new curiosities. There is an almost

universal interest in babies. There are groping questionings about the origin of life, procreation and marriage.

Girls explore these family problems through the medium of paper dolls (with side lights from the comics). Like chess men on a chess board, the paper dolls symbolize agents and situations. Father, mother, bride, bridegroom, daughter, son, baby, visitor, etc. are represented in paper effigies which can be freely manipulated with dramatic commentary which serves to organize ideas. Sometimes the dialogue suggests more insight than the 8-year-old mind can actually claim: "My husband would not be unfaithful to me!" said one dramatic 8-year-old girl as she was creating a paper doll scene. "But he has been, already!" replied her resourceful companion.

The 8-year-old has a certain inquisitiveness about all human relationships. But his interest in marital and sexual knowledge normally does not become either overweening or excessive. Far from being erotic, it is only one manifestation of his many-sided expansiveness. He is extending himself, intellectually and emotionally, in myriad directions, even inquiring into the past history of mankind and into future fate. EIGHT is not a Here-and-Now-age. He is seeking deeper orientations in Time and Space and piercing beneath surfaces. He wishes to know more about the insides of the earth and the insides of the human body. He asks about the geography of Heaven. He is becoming interested in simple maps, Indian trails and the routes of pioneering covered wagons. He is even interested in the Pilgrim Fathers, in primitive man, and Eskimos. He is growing conscious of his own racial status and nationality. But he is by nature so cosmopolitan that this is a favorable time for strengthening sensible attitudes against racial prejudices.

He has an inherent sympathy of insight into other cultures, for he has the native honesty of childhood. This enables him to project his own life interests into the lives of children of foreign lands. He is delighted to hear that Chinese children are like him in so many ways, that they play hop scotch, marbles and hide-and-seek just as he does, that they go to school and read and write even though their word for cow

has horns on it and the word for mouth looks like a mouth. He wants to know what the children of China eat for breakfast and what kind of shoes they wear. He hears that they don't have funnies to read, but he learns that they have butterfly and dragon kites to fly. He assimilates such information not as bare facts, but as human values. He evaluates as he expands his mental horizon. He is impressed with the realization that one fifth of the world's children are Chinese.

At his best, the 8-year-old is so glad to be alive, so tolerant in his sympathies, so liberal in his zeal to explore the unfamiliar, that we may regard him as a rather promising preliminary version of adult mentality. He, himself, already feels more at home with adults. He traffics and talks with them more freely. He likes to confront them with riddles which they cannot answer. When he was more childish, he wanted the adult to give the right answer at once, and precipitately supplied the answer himself. Now he enjoys his unilateral advantage. He has begun to doubt the infallibility of his parents and adults in general. He sometimes tells a tall tale with an observant, poker face in order to test the listener's capacity to detect the fraud. All this is symptomatic of an embryonic adultishness.

Intellectually he is becoming more expansive. He can express amazement and curiosity. His thinking is less animistic. He is growing aware of the impersonal forces of nature. He knows what makes a sailboat go. He can distinguish fundamental similarities and differences when comparing a baseball and an orange, an airplane and a kite, wood and glass. The origin and growth of plants from seeds begins to intrigue him. He takes a deepening interest in the life and life processes of animals. He is beginning to apprehend the momentous generality that all men are mortal. Yes, he too will die.

But this dawning recognition of death does not unduly depress him. He tends to be superlatively alive and even euphoric. His very speech inclines toward extravagance and hyperbole. And how he "loves" to talk! He comes home from school *bursting* with news. "You *never* saw anything like it!" "Oh, it was *awful*." "I *dread* it!" "He *SIMPLY*

couldn't. "It was *big dough.*" "And of course she *would.*" "Oh, *grandma*, you always say *such* stupid things!"

We do not condone any disrespect for grandma. But she probably recognizes the vitality of the growth tensions to which the exuberant 8-year-old is subject. He seems to get a psychologic lift from his dramatic exaggerations. By dramatizing himself he stretches out toward maturity. He does not ever like to fail; yet he is very willing to be put on his mettle. When the assigned task proves difficult he still remains in character. We have seen him clap his brow with histrionic despair: "Hey, what's the matter with me! Am I slipping, or something." "Oh, this has got me crazy. Pretty soon I'll die of this." "I *always* get the easy ones wrong." The adult may well smile at all this. For we see ourselves in the child, in those moments when the child naively strives to be ourselves.

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The 8-year-old burgeons in so many directions that it is impossible to sum up his diversity in a phrase. Individual differences are great, sex differences are becoming significant. Some children are not as articulate as those whom we have quoted in our characterization. Nevertheless, the articulate proclaim trends which are basic and typical for their zone of maturity. In subtle changes of physiognomy, in elongating arms and enlarging hands, the 8-year-old faintly foreshadows adolescence. He still has a rich measure of the engaging naïveté and abandon of childhood. But he is no longer a young child.

At five-and-a-half he was already breaking from old moorings. At six he was in transition capable of contacting a multitude of new facets in the widening world of nature and of man. But he could touch only the beginnings. He saw only in flashes, in opposites, he acted in impulses of avoidance and approach.

By seven, his adjustments and reactions were less piecemeal, his perceptions less sketchy. Patterns more configured began to form in his

interior world. They took on a depth of meaning, imparted by memory, experience and maturation.

At eight, the child began to see conclusions, contexts and implications, where before he had seen only in part. His universe became less disconnected. He himself was less submerged by the widening world. He began to make fundamental distinctions between persons and things, between the impersonal forces of nature and the psychological forces of children and men. Above all he began to see himself more clearly as a person among persons, acting, participating, and enjoying.

This reorientation marked a tremendous advance in his life history as an individual in a democratic culture. He was now ready for the ninth year and the tenth with all their rich opportunities for further expansion and evaluation,—and consolidation.

MATURITY TRAITS

(The following maturity traits are not to be regarded as rigid norms nor as models. They simply illustrate the kinds of behavior—desirable or otherwise—which tend to occur at this age. Every child has an individual pattern of growth, unique to him. The behavior traits here outlined may be used to interpret his individuality and to consider the maturity level at which he is functioning.)

§ 1. MOTOR CHARACTERISTICS

Bodily Activity

The bodily movements of an 8-year-old are fluid and often graceful and poised. His walk is free. He is aware of his own posture and remembers to sit upright on occasion; he is ready to criticize others who do not. He likes to dramatize and express himself in a variety of postures and gestures. He does stunts and enjoys a game of follow the leader.

EIGHT is on the go. He runs, jumps,

chases, wrestles. Hide-and-seek is a favorite pastime but he is also ready for more organized sports such as soccer and baseball. When he is a part of the activity, he is now a good spectator as well as performer.

Courage and daring are characteristics of EIGHT. If he climbs trees, walks a plank, he steels himself. He may verbalize his fear and may need some encouragement but he accomplishes the feat.

There is a new enjoyment in his skating, jump rope and swimming and he is more

receptive to learning new techniques. But he is so spontaneous that he frequently goes his own way after he has tried your way.

Eyes and Hands

There is an increase of speed and smoothness in fine motor performance. Approach and grasp are rapid, smooth and even graceful; release is with sure abandon.

EIGHT can change his posture more adaptively. He bends forward, then sits upright in sitting so that his head is at various distances from his working point. There is more symmetry than at seven and he frequently rests on both elbows or extends both arms out on the table. The variability of posture and overflow shows many of the patterns seen at six and seven but there is more fluidity.

EIGHT can look before he acts but he also likes to do things speedily, so the preliminary pause is not a long one. He can sustain regard longer with blinking but if he wants to talk with someone he shifts his regard in their direction.

EIGHT is somewhat like SIX in his interest in doing many things. He has, however, some idea of a finished product. He does not have the sustaining power of NINE, and may leave many things uncompleted.

In writing, he spaces words and sentences, has a more uniform alignment and slant. His ideas may exceed his ability to write them. He is more aware of body proportions in his drawing of human figures, and particularly likes to draw them in action. He is beginning to draw in perspective.

Although EIGHT is an active doer, he is also becoming a good observer. He does not touch what he sees as often as formerly. He can be part of an activity and still watch another child's performance.

§ 2. PERSONAL HYGIENE

Eating

Appetite. Even the poorest eaters begin to pick up a good appetite by eight; they eat steadily and with interest, though not with the speed usually characteristic of this age. EIGHT typically is ravenously hungry. His mother often says, "He eats like a hog; just shovels it in." After completing one round he starts all over again and asks for "everything." He may even request a third helping. Weight curves rise rapidly and the child may suffer teasing about being too fat. This "ribbing" may produce the desired effect with some control of the food intake, but often a little adult supervision may be needed. Certain foods such as potatoes and desserts can be restricted to one helping; and milk is still relished skimmed.

Refusals and Preferences. EIGHT still has food dislikes. He cannot understand, for instance, why "they had to spoil that beautiful ham with that awful cream sauce." His appraisal of food makes rather candid use of the sense of smell. The smell of peanut butter may repel him (especially if he is allergic to it), or it may produce a beatific suffusion of affectionate delight.

Now that he is eight he is venturously ready to taste almost anything; except that he still does not like fat on his meat and if he has seen a chicken killed, he may not be able to eat chicken for some time to come. He can even inhibit his verbal expressions of dislike, and he obviously musters courage with each spoonful of a disliked food. Parents should be careful not to force foods on a child, because he still may be allergic to some at this age. Nevertheless the allergic child may most prefer the very foods to which he is allergic.

Self-Help. EIGHT is handling his implements fairly well, though some boys still hold fork and spoon pronately, which results in a pushing rather than a scooping manipulation. Fingers, however, are less requisitioned than formerly. Many EIGHTs are now able to cut their meat with a knife, but a fair number do not attain this skill before nine or ten. Carving a carrot is still easier than cutting meat.

Table Behavior. There is a definite contrast between the table manners of the 8-year-old at home and away from home. When the parent becomes too discouraged with the 8-year-old at home, he needs only to take him out to a restaurant or to invite a friend in for dinner! The extra new stimulus is often sufficient spur to reveal latent possibilities; but it does not follow that the child could easily maintain the higher level.

At home he eats best with the family group, for he does like company. Perhaps he has now graduated from a little table of his own in the dining room, to the family table. If so, it is well to have him sit next to his mother, where she can unobtrusively keep him in line with slight hints, and protect him from father's reprimands.

Bolting and speed of eating are major problems. There is something reminiscent of the ways of Henry the Eighth when an 8-year-old "goes to it," loosening belt (or skirt!) to accommodate the increased intake, and not taking pains to repress a tendency to belch. More than one parent has reported this type of behavior!

His speed in eating makes for further complications. If the meal is conducted with the formality of courses, he finds himself ready for his dessert long before the rest of the family. If the outdoors does not call, and if dessert does not im-

mediately follow his main course, he would be happy to leave the table and to return when dessert is served. Some parents have even found that the child enjoys piano practice during the interval.

Some EIGHTs who are not as speedy are apt to play with the silver, or to mess the food around on their plates. Though EIGHT may remain pretty well settled in his chair, he may suddenly bend his body agilely to take a look under the table. When other siblings are present he may get into a dispute, but he may also be able to divert himself without interfering with the adult conversation.

EIGHT still needs to be reminded to wash his hands before a meal, and frequently responds with an, "All right, if you insist!" He uses a napkin, but still does not know what to do with it when he is not using it. He tries to hold it on his lap, but it frequently falls to the floor. Therefore many 8-year-olds solve their difficulty by sitting on it. Others still prefer to leave it beside their plate.

Sleep

Bedtime. There is a definite trend toward a later bedtime hour at eight years of age: 8 P.M. with lights out at 8:30 or occasionally at 9:00. Although EIGHT may know how to tell time, he does not utilize his ability to direct himself to bed. He needs to be reminded, and is apt to put off going upstairs as long as possible. To overcome dawdling he needs to be more specifically motivated. If he knows he cannot listen to one of his favorite radio programs unless he is ready for bed, he sees to it that he is ready. His interest in the clock and also his wish to stay up as late as possible make him susceptible to time stipulation: i.e. if he is not in bed by 8 P.M. he has to go to bed the following night as much earlier as he was tardy. He

does not relish this possibility, and musters speed especially after he has once had to pay the penalty.

Generally he gets ready for bed faster when he is alone than when he is with his parent. He prefers to read, to be read to, or to listen to a bedside radio. When it is time for lights out he still prefers to have his mother tuck him in and say goodnight. This may still be a favorable time for chatting and unburdening. But it may also be the worst time for talking things over if the child is easily stirred up. This type of child fortunately does not as a rule bring up disturbing subjects on his own initiative, and he is also capable of turning off a radio program which frightens him and which might produce bad dreams.

As a rule EIGHT goes to sleep soon after lights are out if he has not been put to bed too early. But there are some children who still regularly need a quieting down time prior to sleep.

Night. Sleep is usually sound. EIGHT is often described as a "wonderful sleeper." Nightmares rarely disturb his sleep. Even toileting needs are infrequent. His total hours of sleep have dropped to an average of ten hours.

Morning. Most 8-year-olds awaken between 7 and 7:30 A.M. They are usually dressed by 8 o'clock, without much need to be reminded.

Elimination

Bowel. Very few EIGHTs have a movement following the noon meal. They seem to divide into two groups, one of which functions after breakfast, the other after supper. An increasing number of the after-breakfast group are able to function during the morning at school if they have not

already done so at home. EIGHT is susceptible to the same type of rapid onset of a bowel movement that the 6-year-old experienced; this however is usually in response to a specific stimulus and is more under the child's control. A sudden shift in temperature caused by going in swimming may produce an immediate desire to have a bowel movement. This type of response may be prevented by reminding the child to go to the bathroom in advance.

Bladder. As at seven, the 8-year-old needs to be reminded to go to the bathroom, especially when he comes home from school or before he goes on a trip. Otherwise he handles his needs well by himself. In the midst of or preceding an unpleasant task either at home or at school, he may experience a genuine need of going to the bathroom. The task of drying dishes is certain to be interrupted by a trip to the bathroom, with a little dawdling thrown in.

Bath and Dressing

Bath. EIGHT may resist his bath, but he enjoys it very much after he gets under way, especially if it is prolonged into a half hour of play. When the parent suggests a bath, EIGHT may fictitiously reply, "I had a bath last night." An old-fashioned Saturday night bath would suit a number of boys, but for the most part EIGHT adjusts to at least three baths a week.

He has acquired more tolerance of warm water and enjoys seeing how hot he can stand his bath. He truly enjoys the feel of a warm bath. Although he may have bathed himself quite well at seven, he now would prefer to be bathed or at least to be read to as he bathes. He may even do spelling and oral arithmetic in the bath. He will take turns with his mother in

washing himself. Boys often enjoy boat play, and may pretend that they are submariners. Now and then they may punctuate their play by drinking out of the faucet. At an earlier age they may have sipped the bath water or sucked the washcloth. EIGHT is not fussy about his face, neck, ears or back because as he says, "I can't see them." He can shampoo himself. He can cut his fingernails but he still needs help with his dominant hand. Keeping fingernails cut is the best way to keep them clean.

A few 8-year-olds spontaneously wash their hands before meals, but most EIGHTS need and accept reminding with only a trace of resistance. They are apt to dash through washing and to wipe most of the dirt on the towel. Therefore a little added instruction of "Soap three times and remember your wrists" may save some laundry.

Dressing and Care of Clothes. EIGHT dresses with fair ease and speed. He may need prodding and if he is asked why he is so slow he may answer, "I think I'm just lazy." A few would still like to be helped, but they usually accept the challenge, "All children dress themselves by eight," and manage quite well, but may ask for help in the finishing touches. They still need to be tucked in, and to be reminded to button the rest of their buttons. A good zipper alleviates this problem, especially on a pants flap. Shoe laces are now easily handled and are kept tied, in fact a new problem arises in that the child wishes to remove his shoes without untying them. This is not too good for the shoes.

EIGHT is again interested in his clothes, and in buying new clothes. He may not only dictate his desires as to style and color, but may also help to select his

clothes at the store. However, he is usually open to suggestions. Boys often prefer greens,—knickers, plain shirts or jerseys—all toward the cooler end of the spectrum. Girls are also shifting away from red and desire more blues and greens. Some girls refuse slacks or leggings and still others prefer them. Changing clothes is no longer a problem; in fact many children prefer daily changes of everything. Most children can now choose their own clothes each morning, with or without help. If they are still given help they are highly insulted if their clothes are laid out on the floor instead of on a chair. Some children are left too much on their own and may appear without any underwear and with two different-colored socks. Some boys like to use their clothes to show their toughness and purposely keep their socks way down because they do not want to be called sissies.

Girls are more careful of their clothes than boys. Boys are genuinely hard on their clothes, and will now report tears and holes if these make their clothes uncomfortable. When they take them off, they may still drop them on the spot or strew them about, but an increasing number now throw their clothes at a chair or even place them neatly on a chair. EIGHT is able to put his dirty clothes in a hamper, at least if reminded. He is apt to lose detachable pieces of clothing. This is in part related to his greater awareness of how he feels and how much clothing he needs. Teaching him to tie his sweater arms around his waist if he is too warm to wear it, may save him from future hunting and often from loss.

A handkerchief as well as a napkin is becoming more meaningful and acceptable. He is beginning to use a handkerchief when he coughs or sneezes as well as when he blows his nose.

Health and Somatic Complaints

EIGHT's improved school attendance record reflects his better health. If he has a cold it usually lasts no more than two days. Even though his temperature may shoot up, he tends to recover quickly. This is the first time that some children are said to have an illness "lightly." Occasionally a child may complain of a sore throat and then nothing more materializes. Hay fever and asthma may return; a number of children have not had any attacks since six years of age. EIGHT has fewer communicable diseases than do younger children, and he recovers more rapidly.

The 8-year-old is in general much less fatigable than the 7-year-old. Although he may not fatigue easily, he may have a return of stomach upsets as at six, if something bothers him. There are eye complaints as at seven, and a reporting of headaches with over-excitement.

Accidents are a major cause of death at this age:—chiefly accidents from automobiles, falls, and drowning. The 8-year-old like the 4-year-old is out of bounds. He is out for action and is ready to try anything. He has lost the caution he had at seven. He misjudges himself as being better than he really is. EIGHT is not really ready to take his bicycle out on the highway. He is apt to get hit by a passing car. When he falls he tends to land on his feet and may therefore break his leg.

Tensional Outlets

The tensional outlets which parents of 8-year-olds report are definitely minimal. The child's whole energy is positively directed toward his social and gross motor activities which he now has under far better control, or can at least tackle. A few boys pull at their pants in the genital

region or scratch their buttocks, especially under rising social tension. This type of behavior is embarrassing for the parent. Looser underwear would help; but often removal of the child from the too demanding social situation is indicated.

The most common tensional outlet at eight is a need to urinate when the child is taxed with something he does not like or is unequal to. Dish wiping is almost sure to be interrupted after a bare beginning by a trip to the bathroom. A difficult school subject such as reading may produce a distended bladder in a very short time. This reaction is in the nature of "internal perspiration," emotionally induced. It is not an alibi, as shown by the copiousness of the ensuing secretion. Intense laughter may also produce an involuntary release of urine.

Thumb-sucking especially in boys has a slight exacerbation at eight. If the child did suck his thumb at six he was careful to hide it from the adult; and he definitely tried to give it up at seven with adult help. But at eight, he may be a bit blatant about it and confess no concern or shame. It tends to occur in relation to reading, radio, going to sleep or waking but not frequently enough to require specific measures. This is often the last age at which thumb-sucking recurs.

§3. EMOTIONAL EXPRESSION

EIGHT is more "outside himself" than was SEVEN. He is less sensitive, less within himself, less apt to withdraw. He is ready to tackle anything,—in fact he likes hard things. He even shows courage in his attack. He thinks he knows more than he really does and often assumes a "know it all" tone of voice. He anticipates with great eagerness and may even expend his interest in anticipation alone. His interest

is short lived and he shifts rapidly from one thing to the next. This power to shift rapidly makes him more controllable, for he calms down quickly with a little help. It is even possible to control him with a look.

He is full of impatience, especially with himself, and wants to get things done at once. "I can't wait" is a repeated phrase of the 8-year-old and this may refer to a party next week, next summer's vacation or the time when he will be ready to go to college. He is constantly in and out of the house. He is so shifting, so little able to sustain his own interests, that he is ceaselessly making demands of his mother. She may say, "He haunts me." He frequently needs someone's complete attention. He needs help to hold better to a task, and he needs support through praise and encouragement. He dramatizes everything, including himself. Even his "tall" stories catch the drama of a situation, and may, let us hope, elicit the proper response from his audience. For dramatizing always needs an audience.

While demanding so much from his mother he is at the same time more resistant to her. He may resist her request or suggestion with an outright "No"; but more frequently he gives some excuse as, "I'm busy," or "Well, I'll do it later." He should be given his time for he usually does obey requests if allowed to come around on his own steam.

He bursts into tears for many reasons, especially when he is tired. He may be disappointed because something he wanted very much has been denied him; he may have had his feelings hurt, may have been criticized, or may have done something which he knew he should not have done. He cries less from inner confusion than he did earlier, but may cry over a sad dramatic episode in a movie or story.

Occasionally his temper may be aroused. He may become so furious with his mother that he may say with real venom, as his face clouds up, "You are a skunk!" He will rarely strike his mother, but may strike a sibling when he becomes angry after his mother has scolded him. It is wise later to point out this mechanism of retaliation to him, for he will understand it. Other EIGHTs may show their anger more humorously. They may tense up their faces in exasperation, project their lower jaws and draw back and flex their arms at the elbow as they clench their fists. This same dramatic pose is sure to produce a laugh from other children, especially in a schoolroom situation. EIGHT also dramatizes things verbally: "This *always* happens to me," "I *never* get a chance to do what I want," "You have asked me *eight million* questions."

Because EIGHT demands one's complete attention, it is wise for the parent to have very definite planned relief from the child of this age. School plays a large part in this relief. New experiences at school are avidly absorbed and help to widen the scope of the 8-year-old. Competition with other children is spontaneous and helps to hold EIGHT to a task. Although he may be bossy in some situations, he can also, when under supervision, utilize this same urge to direct by helping some other child who needs individual attention. His after-school-hours play still needs a certain amount of control. The introduction of an older child often provides a beneficial combination of stimulation and control.

EIGHT is not always the most delightful child to have around. He can be rude especially to his grandmother when she is a part of the household. It would be wise for grandmother to relate herself to the child only through some specific

channel such as playing games with him or reading to him. The worst time for her to intervene is when his father and mother are handling him. Then any interference from grandmother is likely to bring forth some very uncomfortable rude remarks from him. He acts quite differently and is very companionable alone with his grandmother when he goes to visit her in her own home.

EIGHT likes to argue. He is most aware of others' mistakes, especially his mother's, but he is also self-critical and may say, "Am I dopey!" He is aware that others may trick him, and he is therefore on the lookout. He expresses his silliness in nonsense rhyming, and when he is tired he may actually go on a laughing jag.

§4. FEARS AND DREAMS

Fears

Though EIGHT has a number of unresolved fears left over from the time when he was seven, and a slight return to some of his 6-year-old fears, he for the most part attacks life with courage and is out to conquer. He often will not even admit his fears to himself. But he may still be afraid of fighting, of failing, of others finding fault with him or not liking him, and he may refuse to listen to stories about snakes.

He may still have a lingering fear of the dark, and is said to be leery or shy of the dark. Yet he may now demand that the hall light be turned off, and there is nothing which gives him greater joy than to be outdoors with his parent after dark. This is an excellent time to help him to orient himself to the dark, to the coming and going of his shadow according to the direction and strength of the light if there are street lights, and to night noises.

Although fire itself may not be feared,

there may be a compulsive interest in everything about fire. Books about fire may be read and re-read. Space fears at home are now under his control. He is no longer afraid of the attic; and though he may show no enthusiasm for the cellar he can handle his fear if sent on a specific errand. Girls especially may fear strange men, though these very men may be trying to be kind and helpful. They may fear that the men are going to kill them or throw them into the water.

Some children instead of having outright fears may be great worriers. In the midst of an enjoyable experience such as a trip they may worry about repeating the trip. They worry about catching a train or even about their father going into the army. These are the children who tend to cling to the past and have difficulty in coming into the future smoothly. This is their indirect method of taking the next step. Most 8-year-olds attack directly any feared experience and compulsively repeat it to resolve their fear. Or they perpetrate a fear by scaring a younger child. This may prove very unfortunate for the victim. Eight-year-olds may better frighten each other or a responsive adult. The telling of dramatic blood and thunder stories may be a useful method in some cases for satisfying this compulsive interest in the fearful.

Dreams

EIGHT is apparently not much of a dreamer. Boys may have a short return of their animal dreams about wolves, foxes and snakes, or may have dreams of a fantastic nature not necessarily unpleasant. But on the whole if EIGHT dreams, he dreams of daily happenings and pleasant things. Frightening dreams can usually be traced to some immediate influence from the radio, cinema or reading.

§ 5. SELF AND SEX

Self

EIGHT is coming out from his more serious, thoughtful inward self of SEVEN. Indeed, this new outer self seems to want to be constantly contacting people, going places, and doing things. It is as if the child were trying out against the world the self which he was so busy consolidating at seven. He operates best as a self within the give-and-take of relationships with another person.

EIGHT is increasingly aware of himself as a person. He is becoming an individual, a member of a social world. The adult no longer talks down to him. Rather, he talks with him. The child is becoming enough aware of his "self" to use the term. One 8-year-old, looking at her reflection in the mirror, verbalized, "I don't look like myself." The adult likewise recognizes outward signs of this more distinctive self. One mother remarked of her 8-year-old son, "Even his gestures are like him."

The child now is more conscious of himself in the ways in which he differs from other people. He is conscious of wearing glasses, of being left-handed, of not doing as well as or better than the other members of his class. But as yet he is not greatly disturbed by these discrepancies.

EIGHT loses himself in his very real ability to dramatize. He readily becomes the characters in his books, radio programs and movies. His ability improves with an audience response. His pretend cry may be so realistic as to deceive.

EIGHT may be torn between his desires to grow up and to remain as he is. Some EIGHTs "cannot wait" to grow up though some boys hate to grow up and frankly state this resistance. EIGHT's idea of growing up may be that he should be treated in a certain way. He has his idea of how he

should be spoken to. He does not like the out and out reminders which he needed at seven. Now he wants suggestive clues in words or looks that give him ideas of what is expected of him. If his mother forgets and returns to a less subtle handling he may burst into tears because she "gave it away." EIGHT also wants special privileges. He wants to stay up later or to go to grownup movies. EIGHT needs to have his new demands answered in part, even as he did at four, when on his insistence he was allowed to cross a safe street by himself, but accepted the adult's hand on a crowded thoroughfare.

EIGHT is interested in evaluating his own performance, his own relationship with others. At seven he was intent on living up to his own standards. Now he wishes to live up to his notion of the standard that other people have for him. Since his performance is often only mediocre, and his notion of other people's standards extremely high, there is often a discrepancy here which leads to tears and temporary unhappiness. Or he may boast and alibi to make up for the difference between what he can do and what he would like to do.

Sex

Some EIGHTs, especially boys, are still searching for some of the facts about babies in relation to their starting, to the period of pregnancy, and to their birth. Many have already thought about these matters at seven. EIGHT may still not be concerned about the father's part in the starting of a baby. Girls are more likely to be knowing, more inquisitive and more demanding of facts than are boys. Girls may think through far enough to question as to how the father put the seed into the mother's body. If a girl is not informed by her mother after she has asked such

leading questions, she is apt to secure this information from her school-mates. This second-hand information is often far from clear.

An 8-year-old will usually wait for an appropriate time to ask such questions, preferably at good-night chatting time when lights are out. It is often difficult for a mother to explain in a simple unemotional way the facts of intercourse to her daughter. But she need not be frightened, for a daughter who is ready to learn can often ask just the right questions. The daughter readily accepts the fact that the father places the male sex organ into the mother's sex organ. This may start an avalanche of questions from the child as to when, where, and between whom the sex act can occur. All of these questions can readily be answered according to the child's demands.

It is a wise mother who completes her talk with the suggestion that it is best for her daughter not to discuss these things with her schoolmates or even with her younger siblings. The mother will explain that younger children cannot understand and that other mothers want to explain such things to their own children at the proper time. When the daughter is older and comprehends these things better she may discuss them with her friends.

Boys are less apt to secure their knowledge of the sex act by word of mouth from their mothers. They are more apt to learn about it from observing the mating of animals. However they may be slow to transfer their accidental knowledge about animals to the human field.

Girls are becoming more aware of sanitary napkins and ask what they are used for. They are no longer satisfied with the information that they are bandages. They may have heard of menstruation or bleeding and if left to their own thought de-

vices they may relate this bleeding to the navel and umbilical cord. Some girls pass through this stage without sufficient awareness to ask questions. Therefore it is important for the parent to choose a suitable time at nine or ten years of age to impart this knowledge, before the child's own menstruation periods begin.

EIGHT is predominantly interested in the girl-boy relationship even though he may hold it in the margins of his mind. A few boys may still be intending to marry their mothers even though they may have received proposals from contemporary girls. They may even be mulling over in their male minds ideas about a chemical they are going to invent which will prevent their mother from growing old. The romantic note is creeping into the lives of 8-year-olds. Boys recognize a pretty girl, and girls chase handsome boys, much to the boys' delight. Though a boy may have two or three girls, he knows that he is going to marry only one of them. Some "engagements" last over from seven. EIGHT can now plan to live in his own new home after marriage. Some EIGHTS sit for hours over a mail-order catalogue choosing furniture for their far future homes. Boys of eight are often very secretive about their girl-friends especially if they have a new one, because they do not like to be teased or kidded.

There may be some overt sex play between 8-year-old girls and older boys. A few girls at eight are unusually responsive to touch, and readily develop gooseflesh all over the body at the slightest stimulus. They enjoy rolling around on the floor with boys and become quite helpless because of their laughter. This is the kind of girl who is easily drawn into group sex play with older children. This type of girl needs more supervision than the usual 8-year-old. If such groups form it is an

indication that the children involved are not enjoying the more suitable satisfying activities characteristic of their age.

§ 6. INTERPERSONAL RELATIONS

EIGHT may be "easy to get on with" at home, but his best behavior is usually when he is away from home. He is less absorbed in his own activities at home and more dependent upon his mother's suggestions of what to do next. He is not the helper he was at seven. What he does now is dependent upon his mood. He prefers to do jobs he thinks of by himself. He dislikes many of his old jobs such as drying the dishes, setting the table, or picking up his room. He grumbles and grouches over them. There are, however, certain new and more responsible jobs which he attacks with real interest, and for which he readily accepts any supervision he needs. Boys like to burn trash and to do repairing jobs on electric light fixtures and other simple household equipment. Both sexes like to cook and to bake real cakes and cookies.

EIGHT needs considerable help in reorganizing his life. He is likely to spread too much in his thoughts and his activities. Then life gets too much for him and he leaves things in a "mess." His intentions are good and he may return to re-order the mess, but he needs a helping hand. He is, however, aware of orderliness, remarks about a neat kitchen, and enjoys a clean house. He may be very careful of certain things that mean a lot to him—his funny books, guns, and his desk. But otherwise he needs considerable help and planning from his parent.

He likes a reward system of some kind. A point system may suffice, but points are frequently translated into money values. Parents often are disturbed by

the "money-mad" interest of the 8-year-old boy, but they should not underestimate the motivation value of this same interest. Here is an excellent opportunity to use a stimulus which at the same time also serves to give a child some idea of money values. By his poor bargaining, EIGHT shows that he relates his values chiefly to his own personal needs and desires.

A bulletin board chart of his household tasks helps the 8-year-old to accept some of his responsibilities. Then, as he says, "You won't have to yelp at me." Parents need to remember that this and other devices are means of helping the child to organize. The devices are not ends in themselves; therefore one device needs to be frequently supplanted by another.

At eight, the relationship between the mother and child is both complicated and subtle. What the mother does for the child is important as it was earlier, but more important is what she thinks and feels about him. He is extremely demanding of her—may dog her every footstep throughout the day. He demands not only her time, but her complete attention. Even so, her complete attention may not be enough to establish a smooth relationship. EIGHT makes various exactions of his mother: how she shall react, what she shall do, what she shall say. Even an extremely perceptive mother who tries to meet these exactions may find the task a hard one. It is the rare 8-year-old who can promptly forgive his mother when she makes a mistake which directly affects him.

Some EIGHTS who are not too bound up with their mother are capable of showing real devotion and may often tell her how wonderful she is. Physical affection also is expressed. The mother usually continues to be the best loved parent, although the father is coming in for an increasing share

of affection, if he makes a good, adaptive response to the child.

EIGHT does fairly well with younger siblings, but he has rather lost his big brother attitude. He too readily lowers to the siblings' level of response, gets out of hand, may tease and end by fighting. When EIGHT is responsible in caring for a younger sibling he is likely to be too strict. He does best when he is helped to a good start, and is warned ahead of time how he is to act. Then he likes to hear later that he has done well, and that he has now been promoted to privileges that a younger sibling does not have. Too often an older sibling is held down to the level of a younger. Simple privileges such as a later bedtime hour even though he starts to bed with a younger sibling, give him a due sense of prestige and status. He does not have to flaunt these special privileges before his younger sibling. He even enjoys holding them a secret between himself and his parent. If the adjustment between two siblings is poor, planned separation is very helpful. Some EIGHTs protect themselves by the simple expedient of shutting a door.

EIGHT is the age when "real," "bosom" or "special" friends begin to play a part in the life of the child. School becomes important because EIGHT's friends are there. Usually these friends are of the same sex. The relationship between friends may be very close and demanding, something like the mother-child relation, and there is between friends much arguing, disputing, getting "mad on" each other. The quality of the relationship between two children, not simply what they do together, is becoming important in the eyes of the 8-year-old.

Strong friendships are more likely to occur between two children of the same age, but a fair number of EIGHTs play

better with older children. EIGHT is apt to admire an older child of eleven or twelve, and this older child will often in turn protect his admirer from being bullied or mistreated. Some EIGHTs who have previously had real difficulty in approaching children, may now make crude approaches in their attempt to attract another child.

The trend is toward longer periods of relatively peaceful play with others, with only minor verbal disagreements, than formerly. However, any unsupervised play session often ends in disagreement or in the disgruntled departure of at least one participant. Nevertheless, EIGHT figures strongly in neighborhood group play, including baseball and hut play. Some EIGHTs are repeatedly picked on by the rest of the group, but others break loose from the group on their own initiative.

EIGHT marks the beginning of a definite change as to preferred sex of playmates. Boys and girls are now beginning to segregate in play. Girls as a rule are the first to separate off from the boys, and to be conscious of this separation, but theirs is usually a mere quiet drawing away. Boys, when they become conscious of a need for separation, are often very rough and boisterous about excluding girls.

EIGHT is beginning to acquire "company manners." He is better away from home, and is eager both to go visiting and sight-seeing, especially to another city. He meets new people with a fair amount of ease and will even talk to strangers in a restaurant. He telephones well and is able to write down simple messages.

§ 7. PLAY AND PASTIMES

In General

EIGHT abhors playing alone. Whatever he does he wants to do either with adult

or child, and he demands not only the presence of another person, but also that other person's complete attention and participation. Action is the key characteristic of his play. He has a new sense of the whole, a sense of interplay, active relationship, and of practical use. His drawings are now full of action. His airplanes and tanks are drawn in battle scenes, and a person pilots his airplanes and maneuvers his tanks. He puts his tools to helpful household uses by fastening hooks, nailing down train tracks or screwing in loose doorknobs. Girls mix up cooking ingredients to make cookies and cakes. Boys mix up the contents of their chemistry sets to produce new colors and smells and finally to make what they call "the magic potion."

EIGHT wants to set up his telegraph set between two rooms or two houses so that he can actually communicate with another person. He may even wish to communicate with the president of the United States about his blue-print book since he believes the government might be interested in some of his projected contraptions.

EIGHT likes to dramatize. He dramatizes air raids, accidents, fighting and bombing, with his toys. He impersonates characters in the movies he has seen or in the books he has read. He wants to perform magic tricks. Girls' dramatizing is more verbal and sedentary than that of boys. Girls are likely to arrange performances and to put on "shows." Paper dolls furnish a vehicle for this dramatic urge. They also serve as an outlet for EIGHT's powerful urge to collect. Paper dolls and their dresses can be collected in quantities. Moreover EIGHT likes to classify, to arrange and to organize. A collection of varied dolls with their numerous paper

appurtenances offers a channel for such organizing activity.

Boys also succumb to a "collecting craze"—in fact with many it reaches its peak at this age. Children are not only interested in quantity when they collect their stamps or box tops;—they are becoming interested in quality and in rudimentary classification.

Gross motor activity is characteristic of EIGHT's group play. He needs some restraint, since he too readily goes out of bounds. When a group of EIGHTs are left to their own devices, they often revert to abandoned "animal spirits"—wild running, jumping, chasing, wrestling and tree climbing. They are, however, capable of organizing simple war games or hide-and-seek. EIGHT responds well to some supervised control. Both boys and girls enjoy formal baseball and soccer.

EIGHT spontaneously thinks up reasons for organizing his own clubs, such as "The Paper Salvage Club," "The Gadget Club," or "The Library Club." These represent a new interest, but are usually loosely organized and very short-lived. Hut play which may have begun at an earlier age persists longer and often has the dramatic addition of a secret pass-word.

EIGHT enjoys the different sports in season. He rows in the summer and he skis and skates in the winter. There is nothing more typical of springtime (or of eight-year-oldness) than a group of EIGHTs wrangling over marbles. They seem to enjoy the back and forth tug of wrangling and do not wish any adult interference.

Interest in table games, especially in card games, parchesi, checkers, dominoes, reaches an almost passionate height. EIGHT scorns some of the simple earlier games, and enjoys the financial transactions in Monopoly. He is very ingenious in making up his own rules and may even invent

new games. Although some EIGHTS can lose at play with fair grace, this is not always true; a good deal of bickering and some accusations of cheating occur.

Kites, marbles, and tops all appear in season, with airplanes becoming a strong rival to kites. Boys make airplane models, draw airplanes, learn to identify different kinds of planes, or indulge in imaginative airplane play. Other objects than airplanes are manufactured as they work at their work benches. Interest in erector sets and mechanical toys continues strong. Electric trains, chemistry sets, small movie projectors with real films, are enjoyed by certain boys of mechanical bent.

Reading

Those EIGHTS who are just beginning to read well, now enjoy reading spontaneously. Though EIGHT may read well, he may not spend as much time at reading by himself as he did at seven and he again likes very much to be read to. He is beginning to enjoy hearing the classics of childhood. A modern favorite relates the wonderful, magical and absurd adventures of Mary Poppins. EIGHT is also interested in books of travel, geography, and far away times and places.

Comic books are still his favorites. This interest reaches a peak at eight and nine years. EIGHT buys, collects, barter, borrows and hoards his funny books. He is more likely to borrow than to barter since he does not want to part with his own. Though he still likes the animal and slap-stick comics, he is branching out into the blood and thunder type.

EIGHT likes to look at pictorial magazines. He can pore for hours over catalogues. He plans to send for things but he is more likely to carry this through at

nine. Nothing gives him more delight than to receive mail of his own, printed so that he can read it by himself.

Music, Radio, Movies

The initial 7-year-old flare of interest in music lessons may die out unless someone plays with the child or sits with him while he plays. He enjoys playing duets. Practicing cannot be forced and often it is wise to interrupt lessons for a while until he is ready to return to them at a later date (nine-ten years).

The radio has now become such an important part of his life that he will neglect play for it. This is the one activity which he enjoys alone, but he does like to have an adult listen with him and he becomes adept in choosing programs which he feels the adult would be interested in. He is beginning to choose his own programs more carefully and will even refer to the radio sheet in the newspaper. He listens to the same set programs each day, and usually knows at what time and on what station his favorite programs occur. He may still cling to the adventure programs, but he is branching out into mysteries, slapstick comedies, quiz programs and even news programs.

He is coming into his own so far as the movies are concerned. His mother reports that he "loves" the movies. Types of pictures that he previously rejected now become his favorites. He enjoys selected news reels, animal pictures, and mysteries but still does not like romantic movies. He may even follow the amusement advertisements in the daily paper to select his "kind" of movie, with his parents' help. EIGHT is indeed more aware of his likes and dislikes and realizes that they may not coincide with those of other people.

§ 8. SCHOOL LIFE

EIGHT enjoys school and even dislikes to stay at home, particularly if it means that he will miss a special event. Even though he may not be doing too well in his work, even though he may not be getting along too well with his teacher, his attitude is one of response toward, of attack, rather than of withdrawal. He fatigues less easily and is more ready to remain for both morning and afternoon sessions. His attendance record is remarkably good and even when he is out with a cold, his absence is of short duration. When he is absent even for a day he is thinking of the group and what the group is doing. He asks to have his school work sent home to him so that he can keep up with the group.

Some EIGHTs, especially boys, may still have difficulty in getting ready for school and in reaching school on time. It is often difficult to motivate them at home, since they are no longer fearful of being late for school. But they may be motivated by some new school responsibility which challenges them. Getting to school on time is not only the responsibility of the home at EIGHT, but also of the school.

There is now much more interplay between home and school. EIGHT brings to school things which relate to his school projects or to his personal experiences. He also likes to take his products home but is now willing to leave them with his teacher for a few days' display. Although he remembers to take them home, he may lose them in transit.

Many mothers report that for the first time they are informed about school activities. Previously they were told more about misconduct of other children or of their own child's difficulties. Finally by eight, the life in the school room is re-told at

home. The mother enjoys being better informed. She now feels an easier relationship with the school, and is apt to give lavish compliments to the third grade teacher.

Actually EIGHT's teacher is not as important in his adjustment as she was in the earlier grades. She may be even taken more or less for granted. EIGHT is most interested in his school group and would like his teacher to become a part of that group. He joyously accepts her, especially when he catches her in some error and when she in turn accepts the criticism and tosses it off humorously. Learning through others' mistakes is often the surest, most rapid way for the 8-year-old.

EIGHTs enter the schoolroom with enthusiasm (unless of course it is one of those bad days!). They busy themselves by writing on the blackboard, or by inspecting a globe; they may dawdle in the dressing room; but are gradually brought together. They smile, touch, hit out at each other as they pass by.

In a classroom situation they are eager to talk and want to answer every question. They may learn to inhibit long enough for some one child to answer but if he is wrong or too slow they are sure to respond for him. When several become verbal and noisy the teacher can control them by her own silence. They do, however, enjoy taking turns and are insistent that each one has his turn. They comment on another's response or lack of response. "Oh you know that." "That's easy." "You're too slow, Mary."

Transitions are fairly smooth for EIGHT since he likes to change from one thing to another, but there is some talking and dawdling so that a little extra time needs to be allowed for him to settle down.

EIGHT can shift his eyes more easily from blackboard to desk. He can copy

from the board and he also likes to write on the board while his classmates attend to his performance. At his desk he sits facing forward with head position sometimes at arm's distance from the paper and sometimes quite close; he shifts his positions frequently. He works more independently than at seven and does not need the teacher nearby. He raises his arm with an upward thrust to call the teacher's attention but he can wait at least briefly for her to come to him. The impatient EIGHT can't wait to be given directions and though he seemingly understands them, he needs to have them repeated. Often after he has worked for a while, he stops to speak to his nearby neighbor, telling him what to do, asking what page he is on, etc., but he can return to his own work for a while longer. If his interruptions become excessive he responds well to a separation to the margin of the group to do his work. It is unfortunate when this need for separation is treated with punishment as a means of shaming the child by having him sit in the hall outside of his classroom, especially when he improves so nicely after a shift to the margin of the group.

He talks about his own performance and tells another child, "I got three wrong." "My drawing isn't good. This isn't good, is it?" He may discuss who is best in art. If the class is divided into groups he is aware of the grouping and may dislike being placed in a lower group. He likes praise and seeks it.

EIGHT enjoys reading. He can tackle new words through context or by phonetics. He is more skillful and only occasionally makes errors similar to those of SIX or SEVEN. He now omits unimportant words, reverses word order in a phrase but usually maintains the meaning. He has a more uniform speed and can stop

and talk about the story and pick it up again. Many now read well enough to prefer silent reading. Exciting and humorous stories are favored and he may express scorn of a story which he considers too young for him.

Writing is less laborious and there is more uniformity in slant and alignment as well as in spacing of words and sentences. There may be an occasional reversal or a substitution of a capital for a small letter in manuscript writing. Even though he is careless in writing, EIGHT likes to write neatly. "I'm doing my best writing." "Is this neat?" Doodling or drawing in notebooks or on scrap paper is a favorite practice. Despite EIGHT's facility he may not be able to write out a story to full length; he then may wish an opportunity to dictate the unfinished portion, or to continue it later.

EIGHT likes variety. He likes oral or written arithmetic; he likes to use the blackboard and to work in his workbook. He is partial to the new tables which he is learning. He likes to shift from one process to another. His shifting may even be automatic. In the midst of a multiplication example he may shift to addition or to subtraction and something may tell him his mind is playing tricks on him. He likes to take his workbook home to catch up, and is apt to go beyond his assignment. One day he may say he doesn't like arithmetic and the next he says it is easy.

EIGHTS are especially oriented to their own group, room, and teacher. They like to have their teacher a part of their activities, to have her play games with them, read with them, and sit with them at table. They like the total group inclusion in a spelling bee. They like to join other grades at an assembly but on the whole mix less with other ages than they will at nine years of age.

There is more grouping at play. All are able to join in a single group activity. Boys and girls separate on occasion: the girls for jump rope, and the boys for ball play. They can enjoy taking turns—after some struggle to secure a place—and they watch and comment on each other's performance.

§9. ETHICAL SENSE

EIGHT's behavior harks back to that of his 6-year-old self, even though he is now less rigid and is not as likely to "explode." When he is asked to do something, he delays his response. He often says, "In a minute," or "I'll do it later," or he may ask, "Why do I have to do it now?" He is likely to argue with his mother or to give excuses: "I'm too tired," "I'm busy reading," or "I had a bath last night" (when it was actually three nights ago). He may generalize on a point of view and declare, "But people think differently." Some EIGHTS, as at seven, do not hear what is asked of them because they are so engrossed in what they are doing. EIGHT may look at you as though listening, but after you have finished speaking he queries, "What did you say?" A willing, immediately responding EIGHT is somewhat exceptional. Even when he does respond it may be unwillingly as he says, "All right, if you insist," and often grouches and grumbles along the way.

EIGHT demands that the adult treat him more like a grownup. He wants his instructions to be worded just right, he likes to work from clues, or from secret codes. A look will often be enough to bring him back into line. If he is criticized he may burst into tears. But, as at six, he thrives on praise and likes to be reminded of his improvement. Physical punishment is rarely resorted to with the 8-year-old.

Small deprivations such as being deprived of a radio program, a funny book or being made to go to bed early, produce the desired effect with most EIGHTS. A few are unimpressed and may answer back, "I didn't care to hear that program anyway." If EIGHT is allowed to determine his own punishment he is often too harsh on himself and may need help to soften his punishment.

EIGHT is more capable at managing his thoughts and of thinking things through. He is fairly rapid about making up his mind about the bigger things of life, although some EIGHTS prefer to have their mothers make up their minds for them. It is usually the little things of life that set EIGHT into vacillation and deliberation. Maybe the decision involves a choice of cereal, a second helping, a glass of milk or a valentine. EIGHT does not shift from his decision as readily as he did at seven when reasoned with.

EIGHT wants to be good. He is now more aware of the two opposing forces of good and bad. He feels their operation when he is acting in one way or the other. He may be so concerned about them as absolutes that the parent may need to help him to think relatively to explain that "goodness" may be affected by intelligence or age; that one makes allowance for the "badness" of a younger child. EIGHT wants his goodness to be appreciated. He wants to please, to be thought well of, and to get a good report.

Although EIGHT is becoming more responsible for his acts and is willing to take the consequences, his first and usual impulse may be to blame others. He may be laughed out of his blaming, but he is apt to hold to the point that someone else started the trouble and this may have some truth in it. He is more apt to blame others when he is tired or upset.

EIGHT is proficient at alibiing. He especially alibis about being late. He says, "I didn't know the time," or "My friends wouldn't let me go." His time sense is often more scrupulous at seven than at eight. Therefore he often needs a little more supervision at eight. Some EIGHTS cannot tolerate making the slightest error and cover up any exposure by saying, "Oh I knew it all the time, I was just wondering how right you were!"

The same child who earlier dictated to her mother her list of "Things to do and Things not to do" and "Thinking about myself and Thinking about others," at eight asked her mother to write down things which were "Right and Wrong." It is interesting to note that this is a single-column list. Right and Wrong are to some extent brought together into a single standard of conduct and are no longer separated in bi-polar opposition. The list follows:

Right and Wrong

1. It's not my fault that they call me a 'bad sport' when I want to play a different game after I've played one for a long time. I can't help it if there aren't enough people to start another game. Finally I get up enough strength to play some more. And finally they change to my game.
2. Question of getting to school on time: How can I tell the exact time I've got to get up and the exact time to eat breakfast so I can get to school on time. I can't help it if I'm late. It's not my fault. Probably all my guesses about time are all wrong.
3. When some of the people start up a fight, it's not my fault if I want to try and stop the fight even though Miss D. tells us to keep away from fights because the other teachers would think we'd started it. Even if we try to explain to the teachers they think we did start the fight and were just trying to get away from being punished.

4. Something hard comes up and I'm trying to do it. I don't think it's fair for other people to come along and call me a 'sissy' because I can't do it very well. (Some of these things haven't happened yet but they might.)
5. In the coat room even though you're not supposed to talk, I can't help it sometimes because other people ask me questions and tempt me to answer them. Do you blame me?
6. Running in the halls going out to recess. I can't help running in the halls going out to recess because I'm so eager to go out to shout and play.
7. I think I ought to have a little more freedom, more freedom about deciding things—like getting up early in the morning. (I used to plan to, then I'd be too tired when I woke up in the morning.)
8. I think I should have rewards for being good like candy and books I like very much. But I won't always have to be rewarded. Maybe when I'm about nine-and-a-half or ten I don't think I'll have to be rewarded for being good. Then I'll just be good naturally.
9. If it's a sensible reason and something I can do quite easily and something I feel I can do and want to do, and don't have to force myself to do, then I should obey.
10. I think I should do something more about getting up in the morning. I ought to be able to choose sensible clothes. And if I don't, it serves me right to have to take them off unless they are sensible clothes and the weather is right for them.
11. You shouldn't just force me to do things. I will do them if they are sensible.
12. On the playground it's not my fault if I want to slide on a wonderful sliding place in the back of the school and I'd forgotten at that minute that I wasn't supposed to play in the back. (Oh it was neat ice! and there was a little bump at the end!)

EIGHT needs considerable help in the care of his possessions. His awareness of order exceeds his ability to keep things in order. This awareness should make the adult feel that there will be better days ahead when the child will become more

responsible. EIGHT would happily relinquish the care of his room to his mother.

The one sure motivation to get EIGHT to do things is the motivation of receiving money. His mother says, "He just loves money." He likes to add to his store to get the sum up to "even big dough," like fifty cents. EIGHT may spend his entire allowance (20¢-25¢) or his earnings, on funny books, but some like to save up for bigger purchases. They pore over catalogues, haunt store windows, and may indulge in a good deal of imaginative spending.

Money may also serve as a collecting medium, for EIGHT has a tremendous urge to acquire. He collects a variety of things such as stamps, postcards, souvenirs, and odds and ends. He hoards, arranges, and gloats over his accumulated belongings, but his interest in acquiring possessions is usually considerably ahead of his interest in taking good care of them.

EIGHT is not prone to take the property of others. However, with his awareness of money and what it can buy, he may be found taking some of the household supply of money. This is usually considered by parents as a far greater offense than taking pencils and erasers at an earlier age. But the child is in each case expressing a need characteristic of his age. Parents should be aware of these needs and should see that they are provided for in suitable ways. Many EIGHTs are quite generous and may use the very money they have taken to treat their friends.

EIGHT is becoming more truthful. He may tell a tall story to impress his audience. The truth he tells may even be to his own detriment, but he does not usually make damaging revelations to anyone but his mother. It is very important to him to have such a relationship of confidence

that he feels free to tell her of his misdeeds, failures or omissions.

§ 10. PHILOSOPHIC OUTLOOK

Death and Deity

There is often a resurgence of an active interest in religion at eight years of age. There is no new penetration of thought into the concept of deity or death. What EIGHT has worked out in his own mind along with whatever he has been taught to believe at six and seven, he now takes for granted and accepts. He likes to go to Sunday School. He wants to be taught passages and psalms from the Bible. He likes to memorize. He may spontaneously read the Bible at home and is very much interested in Bible stories. If he has stopped saying his prayers at seven, he may now want to return to them again. He wants his mother to say them with him, and he would often prefer to sing them. EIGHT becomes an active participant without thinking too much of what it is all about.

His chief religious interest at this age seems to be in the matter of heaven. This is not so much a concern about God in heaven as it was earlier. Now God's connection with heaven appears to be taken for granted. Heaven is a place where you go after you die.

Death is something he takes pretty much for granted unless, of course, there is a death of someone who is very close to him. Most EIGHTs have accepted unemotionally the fact that all people even they themselves will one day die. The earlier interest in coffins, burial, and other appurtenances of death continues but it is much less intense.

Time and Space

EIGHT is becoming more responsible in regard to time. His increased speed in

action makes him less vulnerable to the demands of time. He can now be expected to arrive at school on time. Some EIGHTS do not tell time as well as they did at seven. They may read time in reverse so that 9:20 may be read as 20 minutes of 10. Besides telling time less well, EIGHT is often careless with his wrist-watch. It may be wise for EIGHT to put his watch away for a while, if he has one.

Though he may tell time less well, he is extremely aware of punctuality, that is, of what time he should be here or there. He keeps himself posted by asking others what time it is. If he knows that he is going to arrive home late, he may be responsible enough to telephone.

He is most efficient in telling time when he wishes to tune in on his favorite radio program. He is much less efficient in telling time for bed or school and still needs a certain amount of reminding.

EIGHT is interested in time far past, in ancient times. He likes to hear and to read about things that happened when his own country was new. But his chro-

nology is rudimentary. He may not be able to say certainly whether or not George Washington is mentioned in the Bible.

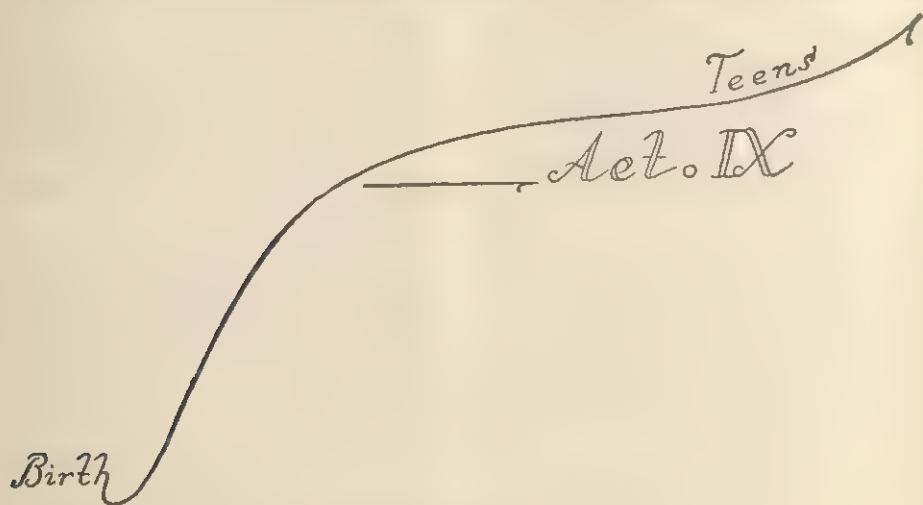
Personal space is expanding for the 8-year-old. He can now return home by bus from a more distant point and may also travel on a bus by himself on a familiar or pre-arranged route if he is met. He takes in such a wide walking area within his own neighborhood that it may be difficult to locate him. He is coming to know his own neighborhood so well that he becomes interested in new ways, especially in short cuts, and may become lost in the process.

He is eager to take trips to new cities, to visit museums, zoos and places of interest. His spatial world is expanding even further through his interest in geography. He draws maps with keen interest.

EIGHT usually has a fairly clear notion of points of the compass and of different parts of the community in relation to each other. He can now distinguish right and left on the person of others as well as on himself.

9

NINE YEARS OLD



BEHAVIOR PROFILE

THE 9-year-old is no longer a mere child; nor is he yet a youth. Nine is an intermediate age, in the middle zone which lies between the kindergarten and the Junior High School teens. Significant reorientations take place during this intermediate period. The behavior trends of the eighth year come to clearer issue; the child gets a better hold upon himself; he acquires new forms of self-dependence which greatly modify his relations to his family, to school and classmates and to the

culture in general. The changes come so subtly that parents and teachers often are not sufficiently aware of their import. But they are psychological transformations so consequential both for the child and for society that they deserve more recognition.

Self-motivation is the cardinal characteristic of the 9-year-old. It is the key to understanding him on his progress toward maturity. He has a growing capacity to put his mind to things, on his own initiative or on only slight cues from the environment. This typically gives him a pre-occupied business-like air, both at home and at school. Indeed he is so busy that he seems to lack time for routine tasks and he does not relish interruptions. On the other hand he can interrupt himself. For example, if he is engaged at a paper task he can interrupt it and take a trip to the pencil sharpener and return to his work without loss of momentum and without a reminder. He also is able to fill idle moments with useful activity. He can work two or three hours at a stretch with his erector set. He likes to tax his skill, to put *himself* on his own mettle.

In comparison, the 8-year-old is much more dependent on environmental support,—on the pressure of the group and the stimulation of the adult. EIGHT expends a quantum of attention on a difficult task, but soon exhausts his energy. NINE is able to summon reserves of energy and renews his attack for repeated trials. This is due to the greater maturity of his whole behavior equipment. No wonder that he is such an excellent pupil, ready to tackle anything that lies reasonably within his powers. NINE is an optimal age for the perfecting of proficiency in the tool subjects, in the fundamental operations of arithmetic and in other skills. The 9-year-old is so interested in perfecting skills that he likes to do the same thing over and over again, whether it be the throwing of darts or dividing by one digit.

Confronted with an unfamiliar task (for example, tracing a maze with a pencil), he may say, "Hm!" with a mature inflection and reflectiveness which reminds us that he is no longer a child in his intellectual attitudes. He adds, characteristically, "Let me think about it. I always have to think first." He likes to plan in advance and to see ahead. If a task

is complicated he asks to have the successive steps explained to him. Then, when he attacks the problem without immediate success, he reveals a power of self-appraisal. Perhaps he says somewhat self-deprecatingly, "I'm not so hot!" "Gee, I'm just trying to find out what's wrong here." "Sort of sloppy, isn't it?"

Presently we shall note that this power of appraisal is by no means limited to himself, but extends to other persons. He shows considerable ability in social criticism as well as self-criticism. Add to this a sizable capacity of self-motivation, and one can understand why NINE so often makes a good, solid, business-like impression!

This does not mean that he is a finished product. Although solid at the core, he has a growing margin which is neither fixed nor stable. New emotional patterns are in the making. This is shown in his complainingness, and in variability of mood,—now timid, now bold; now cheerful, now grumpy. Shyness may be associated with a new fondness for his teacher. He may "hate" to stand before the class to recite a poem. Sometimes he is said to be "in a daze," "in a fog," "in the clouds." He may need a reminder or he may excuse himself with a remark, "Oh that's my poor memory." Such benign symptoms of absent-mindedness are probably due to new mental events occurring at his growth margins!

When we say that he also is business-like we do not wish to imply that he is financially minded. He is not as money-mad as EIGHT. Frequently he is only feebly motivated by coin and by allowances. He has so many better reasons for being busy. He is fond of making inventories and check lists. He likes to classify and identify, to order his information. He is in character as a baseball fan, familiar with a surprising array of facts and figures. He has a factual interest in seriations and categories,—the insignia and ranks of army and navy officers, the distinctions between types of airplane, the flags of the United Nations, etc. If he has a passion for comics,—and he often does,—it is their informational content which makes the main appeal. He has an eye and an ear for significant details and tidbits that come via radio, movie, pictorial magazine and adult conversations.

We emphasize these intellectual traits of the 9-year-old because they color and direct the manifold patterns of his personal-social behavior. He shows a new discriminativeness in his parent-child and in his pupil-teacher relationships,—new refinements in his emotions and attitudes. The deepening of his emotional life, (for he is less shallow than he was at age eight), is, of course due to underlying growth changes in the physiology of his neuro-humoral system. Fortunately, however, feeling and insight are in better balance than they were at five-and-a-half and six years. Accordingly, your well-constituted 9-year-old tends to be a relatively well-organized young person, who is taking a measure of himself and who can take a measure of you. He neither likes nor needs to be patronized with condescension. Usually he is not over-aggressive. And his estimates of his parents and of his teachers can be penetrating and accurate, as well as candid.

In view of his immaturity he shows an impressive sense of fairness and even reasonableness in his estimates and expectations. He has overcome his more infantile alibiing. He can accept blame; and if several persons—children or adults—are involved in a difficulty he wants all blame apportioned *fairly*. He lays stress on who *started* the difficulty. He has a keen emotional and intellectual interest in punishments, privileges, rules and procedures, particularly at school and in his club life. He adjudges the fairness of discipline both by self and group standards. He is very receptive to elementary ideas of justice. The culture can sow seeds of prejudice, but he responds readily to injunctions against racial discrimination.

Naturally, there are innate differences in the depth and patterns of the ethical sense; but under favorable cultural conditions, the 9-year-old is essentially truthful and honest. He can say to himself, "I'll have to be honest," and he will go back to a store to return excess change, as well as to claim short change. Not having as yet reached perfection, he may think it is worse to lie to one's father than to someone else. But all in all, he is dependable and responsible. He likes to be trusted. He likes a little freedom, when he can be "loose on the town" for an hour or two, without over-inquisitive parental supervision. His complaining-

ness need not be taken too seriously. As in the 7-year-old it may be a symptom that new emotional patterns are in process of growth.

Evidently he is developing a sense of individual status, which needs sympathetic understanding by his elders, above all by his own family. He likes his home; he feels a certain private loyalty to it; he glows with pride at his wonderful father. But he also feels the tensions of pulling away, of achieving a detachment which will place him more on his own. So when he is abroad he does not wish to be obtrusively called "sonny,"—and she does not wish to be identified as "my daughter"! Above all, the healthy 9-year-old does not want to be babied by a mother who unwittingly treats him as though he were still a young child in need of unremitting protection. Fathers sometimes go to the opposite extreme, and treat him as though he were a "young man." Actually he needs help at critical points; and he likes to go to his parents for such help. Skillful management suits the help to the needs; and withdraws the help when it fosters desirable independence.

Parents, therefore, should be gratified when at times the 9-year-old shows more interest in his friends than in the family excursion which has been so benevolently planned for him! Many prefer to foregather with their boon companions for one of those long clubby sessions in which talk and planning may figure more strongly than active play. There is so much that needs comfortable confabulation among friends,—a kind of exchange which even the family circle cannot afford. NINE is a great talker. Let him talk.

Let him talk with his confrères, for thereby he gets at least a rudimentary sense of brotherhood. He does a little social planning. He sharpens his perceptions of others and of himself. He shares confidences and estimates. He discusses future vocations, and frankly tells his pal: "You haven't got the makings of a doctor!" In spite of a little quarreling and disagreement he gets on well with his playmates. He builds friendships of some depth and duration. He participates actively in the formation and conduct of his still short-lived club with its passwords, codes, dress, hide-away, bulletins and tabus. He is learning to subordi-

nate his own interests to the demands of the group. At school and elsewhere he is more competitive as a member of the group than as an individual.

In school the groups may include both boys and girls, but the spontaneous groupings are nearly always unilateral. Girls have their own clubs in which some time is devoted to giggling and whispering, whereas boys indulge in rough-housing and wrestling. The boys have more trouble with bullies of their own age or older. Birthday parties are, by choice, usually limited to one sex. Boys tease each other about girl friends. Girls tease each other about boy friends. Each sex cordially disdains the other.

This reciprocal disdain is part of the mechanism of development. It has much the same logic as the withdrawal tendencies which cause these same boys and girls alike to separate themselves to some degree from family ties. Attachment must be counter-balanced by detachment. To grow up, the 9-year-old must achieve a sense of his individual status, not only in relation to his parents but also to the opposite sex.

So each sex expresses a certain contempt for the other. Bragging to each other, spying on and teasing each other serve to define psychological distinctions which are in the making, both with and without the aid of the culture. "Girls don't count," says a superior-minded boy. In rejoinder a perceptive girl says, "Boys are loathsome creatures. I enjoy watching them!"

But, significantly enough, with respect to babies, such aversions do not hold. Girls may show a strong and affectionate interest in their younger sibs. And a 9-year-old boy in the capacity of big brother can take over to a remarkable extent the details of infant care when the parents are temporarily absent and entrust him with the responsibility. Such attitudes also are part and parcel of the total sex development which ultimately embraces family life.

There are varied forms of new awareness of the parental and reproductive aspects of sex. Most of the 9-year-old girls have knowledge of the process of menstruation. Many of the boys and girls have some

comprehension of the father's part in procreation. They have observed the bearing of young in animals. They show both modesty and inquisitiveness with regard to the elementary physiology and anatomy of sex. The intellectual realism of this age saves it from romantic excesses. The 9-year-old boy is relatively careless as to sartorial and cosmetic appearance. The reorientations in the sphere of sex, however, are sufficiently marked to indicate that the child of yesteryears has now moved into the pre-adolescent sector of the life cycle. The girls are nearer to the age of puberty than the boys. This fact and the variations in physiological maturity within each sex account in part for the wide range of individual differences so apparent at this age.

A behavior profile can scarcely do justice to these individual differences, for a profile must be drawn with broad strokes. This compels us to disregard the finer lines and shadings, which are so important for the delineation of a specific boy or girl,—the one, for example, in your own household. He is stamped with individuality. He has gestures, ways of laughing and exclaiming; he has humor, sulks and moods, table manners, possessions, modes of speech, demeanors and enthusiasms, which make him unique. Nature will never contrive another like him, for she abhors identity, even in twins derived from a single, selfsame egg.

Nine is preeminently an age when individuality seeks to reassert and to reorganize itself. An active 9-year-old is not too dependent on praise; and may even show surprise when he gets it; but he accepts approval and benefits from it. In fact he likes timely praise, and shows much greater capacity than the 7-year-old to assimilate praise. If he is of an introverted, withdrawn nature he will, of course, need to be treated with special insight and, at times, with leniency. In case of doubt it is wise to tolerate idiosyncrasies which express forward thrusts of development. He has to find himself.

* * *

In spite of the wide diversity of individual differences we can still recognize general developmental characteristics which typify the nine-year-zone of maturity. Recall the 8-year-old. Three traits distinguish the dynamics of his behavior: speediness, expansiveness, evaluativeness. These traits continue to operate at the nine-year-level; but with important modifications and a higher degree of integration.

EIGHT seems to work very fast, because he reacts with somewhat abrupt bursts of speed. NINE still is speedy, but his speed is under better control, and therefore less noticeable. Particularly when he puts his mind to a familiar task, he works toward the end and completion of his performance; and he sustains his speed for longer intervals. But his overall modulation including middle as well as ends will be perceptibly greater in another year.

He has a greater interest in process and skill; he is more able to analyze his movements both before and during action. He also is more interested and persistent in practicing his skills,—an interest and perseverance based on the greater maturity of his neuro-motor system. Sometimes NINE is facile and modulated. Sometimes he seems to overdo something he likes; he repeats it over and over again. He may want to see the same movie again and again. He probably repeats with slight variations which help him to assimilate and refine a new experience. The extensiveness of NINE likewise shows more purpose, scope and depth. It is less sketchy, less episodic; it is more channelized, and in the end, more organized. Again a maturity difference, enriched by accumulated experience.

The expansiveness of EIGHT was much influenced by immediate environmental contingencies and fortuities. The extensiveness of NINE is engendered more from within. It is self-motivated. No one needs to tell him to make his expanding lists and inventories; nor to add new chemicals to his collection; nor to make plans for his future profession. The same inner forces impel him to spread into the remoter worlds of history and biography. This is psychic expansion,—an organizing growth process.

As we should expect, the evaluations of NINE are deeper and more discriminating than those of EIGHT. His emotivity, to use an academic word, is more sensitive, more refined. Just as the lens of his eye has greatly gained in capacity to accommodate to small distances, so his total organism has made a notable gain in capacity to feel small values and to accommodate to refined differences. We have already extolled his new powers of self-appraisal and of social judgment. They are bound up with the growth of emotivity which enables the 9-year-old to experience and to express finer shades of feeling. His voice has softened, his tensional outlets are more delicate, his disgusts more dainty. He undoubtedly feels novel emotions and novel variations of old emotions; because emotions grow and change in pattern with each passing age.

Philosophers have not solved the mystery of human conscience. But the 9-year-old might teach them something of its origins. In him, conscience is clearly in the making. His emotivity is now so mature that he detects nice shades of wrong-doing in others, and feels the blameworthiness of his own wrong-doing. He wishes to be straight with the world. He comments on an adult's unfairness: "That's a gyp." He is realistic about moral matters. He factually says to his mother, "I know you won't like this, but I'm going to tell you." In such articulate children we glimpse the very mechanisms of conscience. It is heartening and also dismaying to realize that the ethical sense is already so highly developed at this early age.

There is a certain reasonableness in the psychology of the 9-year-old. He is open to instruction; he is factual, forthright. He is not too interested in magic, he has a healthy strain of skepticism. He has put aside the Santa Claus myth, but he is not so ruthless as to destroy it for a younger sib. He believes in luck and chance; but he also believes in law; otherwise he would not be so anxious to find out how things are done, and why they are what they are. He seeks correction and explanation of his errors. For the time being he is somewhat less concerned about God, Heaven, Fate and prayers. He himself is taking

himself in hand, almost in a spirit of rationalism. This is a noteworthy developmental phenomenon.

In portraying the behavior of the 9-year-old we have deliberately emphasized his positive and constructive traits, because they best represent his potentialities in terms of the future and his attainments in relation to his recent developmental past. At times, of course, he still functions like an 8-year-old. But his best traits are authentic indicators of true growth trends.

These traits are his realism, his reasonableness and his self-motivation. Functioning in favorable balance they make of him, on a juvenile scale, a business-like, fair-minded, responsible individual. He is no longer a "mere" child. He is integrating his long past,—not finally, but intermediately. He is trending toward the teens.

MATURITY TRAITS

(The following maturity traits are not to be regarded as rigid norms or as models. They simply illustrate the kinds of behavior—desirable or otherwise—which tend to occur at this age. Every child has an individual pattern of growth, unique to him. The behavior traits here outlined may be used to interpret his individuality and to consider the maturity level at which he is functioning.)

§ 1. MOTOR CHARACTERISTICS

Bodily Activity

NINE both works and plays hard. He is more skillful in his motor performances and he likes to display his skill. His timing is also under better control. He now shows great interest in competitive sports such as baseball.

Boys are quick to assume an active fighting posture and they strike out at each other and wrestle. They frequently "let

off steam" or make a wild rush toward something.

NINE is apt to overdo. He has difficulty calming down after recess or after a strenuous game. He is apt to ride his bicycle too far or to mow the lawn until he is exhausted.

Eyes and Hands

The eyes and hands are now well differentiated. The two hands can generally be used quite independently. The fingers

also show new differentiation. NINE pianos them on a table, picks and fiddles and flicks or fingers the edge of a paper he is reading.

He is now reported to be either good or poor with his hands, or to be a keen observer. Individual skills stand in bold relief at this age.

Movements expressed in so many ways at eight are now more restricted. NINE likes still life, or portrait or poster painting. He sketches lines with short strokes, adds more details to his work. There is a concentrated quality to his quick identification of an airplane in the sky.

NINE has an open-eyed stare which he maintains for several seconds without blinking. He can consciously see what he is regarding, or he may be focusing without regard. One child said she could look at something without seeing it and thoughts went jumping through her mind.

Sitting posture is now more awkward. The child slouches in his chair and gets into unusual postures. He is apt to have his head quite close to his working point at times, although he also leans way back. He thrusts an arm out forward and also back, he stamps his feet, he claps his hand on his head.

NINE can write for a prolonged time. He likes to make extended lists and to catalogue his collections.

§ 2. PERSONAL HYGIENE

Eating

Appetite. NINE has his appetite under better control than he did at eight. The good eaters have less tremendous appetites and the poorer eaters have better appetites than earlier. NINE, however, thinks more about food than formerly. He enjoys reading cook books and helping to prepare food. The minute he arrives home

from school his first thought may be about something to eat.

Refusals and Preferences. NINE is rather positive in his food likes and dislikes. He states them frankly. Some NINES do eat everything, but if not, the adult is inclined to cater to their demands since these are so positive. Plain foods are still preferred. Meat gravies are now accepted. Puréed foods and fat on meat continue to be disliked. Desserts and sweets are in the ascendency.

Self-Help. NINE is fairly deft with his implements. Although many NINES cut well with knives, a few continue to need help or tend to saw their meat in their attempt to cut it. Fingers are rarely used. NINE is aware of bad table manners even though he may not be exercising good ones. He may even be enough aware of his own bad manners to keep an eye out for his father, to see if he is going to be reprimanded or not. It is remarkable to see how much better NINE conducts a meal even in the handling of his implements when he has the added stimulus of company or of going out to dinner.

Table Behavior. The child's table behavior is evidently improving because it is less on the parent's mind. NINE may even be complimented for his manners. He chews more skillfully and is less apt to chew with his mouth open. He is also less likely to overload his fork and to bolt his food. He no longer fiddles with his food.

He may be able to combine talking, listening and eating well, but some NINES tend to talk too much at the table while others listen too concentratedly.

NINE may be expected to wash his hands spontaneously before coming to the table,

although he at times gets mixed up in thinking that he has washed them when he has not. Actually he lives up to what is expected of him rather poorly, and most frequently needs to be reminded. He responds willingly. He generally places his napkin on his lap. But it still has a tendency to slide about and may fall to the floor. His eating is so much neater now that he has much less need of a napkin than when he was younger.

Sleep

Bedtime. Getting ready for bed is no longer a problem unless the child is sent to bed too early and feels that he does not have the privileges of other children. Eight o'clock is a common bedtime. NINE still needs to be reminded that it is bedtime even when his radio programs actually keep him posted on the time. He may listen to a program before he starts for bed or he may undress as he is listening if he possesses a radio of his own. Some NINES prefer to read for a while after they are in bed. The majority are asleep by 9:00 P.M. There are still a few who need to be asleep by 7:30 P.M. Such children need to be protected from the influence of their friends who do not go to sleep before 9:00 P.M. or later. Those NINES who go to sleep late may need to be protected from themselves by having their lamp or radio removed. They have a tendency to switch their radio or light on again after it is time to go to sleep.

Night. NINE is a good sleeper and on the whole a quiet one. A few awaken screaming from nightmares but are easily quieted. Although NINE often has bad dreams his sleep is not greatly disturbed by them. As at eight, his total sleep averages around ten hours.

Morning. NINE often controls his waking by setting his alarm clock. He may even set it for an early hour and then go back to sleep or he may wake up slowly after it has rung. He often plans things to do in the morning on awaking. In fact he seems to enjoy more early morning activity than bedtime activity. Seven is a common waking hour and this gives him plenty of time for reading, fooling around, dressing and even for practicing at the piano before it is time for school.

Elimination

NINE has his elimination functions under his own control. As at eight, the bowel movement is most apt to occur after breakfast or in the late afternoon or evening. One movement is the rule, but there may be two. NINE can function at school but is more apt to function at home. He rarely gets up in the night to urinate. He rarely needs to be reminded to go to the bathroom for he now possesses both an inner and outer control.

Bath and Dressing

Bath. The bath is neither resisted nor especially enjoyed. NINE does not wish to bathe more than two or three times a week. He accepts the adult's suggestion that he bathe and usually manages the tub by himself, but he still needs some supervision and likes to have an adult around. When he is once in the tub he rather enjoys soaking in quite warm water. On the whole he carries through the entire bath procedure rather well and fairly independently.

He still needs to be reminded to brush his teeth and to brush them well. He also needs to be reminded to wash his hands before meals. But he usually takes suggestions good naturedly and as though he

had been planning to do all of these things by himself but had forgotten.

Dressing and Care of Clothes. NINE is better than he was about finishing the loose ends of dressing. He finishes buttoning, ties his shoe laces, and tucks in his clothes. He is not too much interested in his clothes and would prefer to have his mother lay them out for him. He is apt to throw his clothes around the room, but can be taught to put them neatly on a chair. He is not very consistent about putting his dirty clothes in the hamper unless he has a daily change. In fact he is not very proficient at judging whether clothes are dirty or not and is apt to put on yesterday's clothes because they are handy. Boys especially prefer old clothes. Most NINES are fairly good about reporting tears and holes in their clothes and may even be insistent about their being mended.

NINE is as poor at hanging up his outer garments as he is his other clothes. The minute he gets home he is inclined to dump all of his belongings including clothes on the nearest chair or to fling them about. He responds well to being reminded but he responds even better to some device such as having to pay a penny fine for each piece of clothing he has neglected to hang up. Untied shoelaces also respond well to a fine system.

Boys are becoming interested in combing their own hair. Girls likewise are interested in trying to do their own hair especially if it is not in braids.

Somatic Complaints

On the whole NINE enjoys excellent health. He continues to throw off colds rather quickly. Children who have previously had ear, lung or kidney complications may have a recurrence between the

eighth and ninth year and may suffer a rather prolonged illness. A few children show marked fatigue and need to be protected from doing too much. Many complain a good deal, especially about headaches and stomach aches and these complaints often occur when the parent has requested the child to do some task which is disagreeable to him.

Tensional Outlets

There is a marked decrease in the more obvious tensional outlets at NINE. A very few children continue to suck their thumbs, but only at infrequent intervals. These children respond well to parental reminding or to the dentist's method of putting a pronged plastic in the roof of the mouth.

Boys especially seem to need to "let off steam." They often wrestle around and cannot seem to keep their hands off each other. NINE is apt to growl, mutter, sulk or find fault in relation to specific happenings.

NINE's most characteristic tension release is through fine motor movements. He fiddles, picks at his cuticle, runs his hand through his hair or shuffles his feet.

§ 3. EMOTIONAL EXPRESSION

NINE is finally becoming what his parents have been striving for. He deserves and receives outright compliments such as: "He takes more responsibility," "He is both more independent and more dependable," "He is easier to get on with," "He can be trusted," "He obeys well."

Something very real is happening to NINE in relation to his self-organization. He is coming within the realm of the more positive emotions. He may say that he hates certain subjects, but he tries to do them anyway. If, however, he is appre-

hensive about a certain subject such as arithmetic, it is important that he does not become more apprehensive to the point of "going to pieces," and refusing to go to school. Apprehensive children need more concrete material, so that they may succeed at one level and then gradually work up to a higher level knowing the exact process through which they must go.

NINE may be impatient and quick tempered, and may flare up, but all of these responses are very shortlived. He may cry but only if he gets mad enough or is really hurt. NINE is more likely to be upset and apprehensive about his own actions.

NINE is actually the opposite of impatient. He plans his separate activities and even his whole day. He is persistent and wants to complete what he has planned to do. He can, however, be interrupted by a request from his mother, obeys with good grace and returns to continue with his activity. His one difficulty may be that he is so absorbed that he does not hear his mother when she speaks. Some NINES are still distractible, but they can be very persistent with the few things they set their minds to. NINE like SEVEN is capable of developing passions for certain activities. As his mother says, "He could listen to the radio all day long."

NINE is ashamed of some of his past acts in fields which he now has under better control. He may show embarrassment at being criticized, at exposing his body, or when he is in a social situation with the opposite sex. Both his parents' and his siblings' acts are subject to his disgust. He has his own measuring stick by which he measures them. He wants them to act "properly."

NINE is a loyal and devoted friend. He can always be sought by his friends for

protection and is upset when his friends are brow-beaten. He is prone to admire members of his own sex, either of his own age or often a few years older. This is the beginning of hero worship.

It is surprising to see how little needs to be done to tip the scales in the right direction for NINE. One experience may set off a spark that needs no replenishing. The sight of a person with bad table manners may be a powerful stimulus for NINE to improve his own ways. The redecoration and rearrangement of his room may shift him from a persistent pattern of disorder to one of pride in the care of his room. Even the present of a bone from a far off battlefield may set him on an encyclopedic search for all the knowledge he can secure about pre-historic man.

This is an age when the child becomes impressed with whatever he is told. Prejudices which often start at eight need to be explained to the 9-year-old so that he will not become caught in them.

NINE is an age when a strong feeling-tone prevails. We see here definite signs of empathy; for instance the child may say that when he sees anybody else hurt, he hurts in the same place. Some of his established emotional reactions, like other characteristics, however, are variable and he may swing quickly from one extreme to another, as for instance from marked shyness to extreme boldness. Another extreme is shown in his alternation between a "don't care" attitude, and an extreme sensitivity to criticism and desire to please.

§ 4. FEARS AND DREAMS

Fears

NINE says about himself, "I don't frighten very easy." Indeed he has very

few fears. Some NINES, however, are still resolving tag ends of earlier fears of storms, cellars, sight of blood, or swimming with face under water. These fears have a specific personality reference by this age and have usually had a prolonged and intense course.

Though NINE has few fears, he is a great worrier. He is upset by little mistakes he makes. He may be apprehensive about crossing a street at a traffic light. He worries about failing in his studies; about doing the wrong thing in a social situation, such as extending his left hand instead of his right; or not measuring up to the other children. He needs reassurance, or praise, to be informed where he stands. Sometimes competition makes him worry more, and if it does it should be minimized or avoided.

Dreams

The sleep of the 9-year-old, though uninterrupted and quiet on the surface, is often ruffled underneath by many scary, horrid dreams. A few NINES awake screaming, sit up, or get out of bed, usually to go to their mother's bed, but for the most part they may appear to be sleep-walking. They know they have been dreaming and quiet quickly. When they do know that they have been dreaming, they may not be able to remember their dreams.

Horrid dreams are reported most commonly, and these can often be explained in the light of what has happened during the day. Reading, cinema, radio and circus performance all leave their imprint. NINE is chased by animals or people. He may be hurt, shot, or kidnapped. Murder plays a prominent role. His best friend or his mother may be killed. His mother may be running away. Fire and tornadoes may come to destroy trucks and houses.

NINE knows that there is a relationship

between his daily activities and his dream life. He may know that a certain repeated rhythm will produce one of his awful dreams of standing on his head and whirling round and round. The thought of it makes him shudder. That is why he tries to protect himself from stimuli that might produce certain bad dreams. He reads scary books during the daytime only. He reads a comic book as he is listening to a scary radio program.

NINE does have some pleasant dreams but these seem to be in the minority and more difficult to remember. He often enjoys dreaming in the morning and may want to go back to sleep to continue his dreaming.

§ 5. SELF AND SEX

Self

NINE is rightly spoken of as "self-sufficient" and "on his own." His independence is something he can now manage. He can think for himself, reason by himself. You can usually depend upon him that if he says he has done something, he really has. He can be trusted.

NINE has himself under better self-control. He withdraws from his surroundings enough to gather up his sense of self and put it to good use, but he does not retreat far into himself as he did at seven. He does not feel impelled to boast and to attack to protect himself as he did at eight. Now he thinks in terms of fighting with his brain as well as with his body. For instance, he plans his time so that he can get off to school easily to protect himself from being pestered on the way.

He has a new capacity to set his mind to a task and to see it through. He is even ambitious in his demands of himself. He wants to succeed not only in a single task

but also in general. Girls have a way of getting what they want without meeting resistance.

A good relationship with others is important to NINE. He is anxious to please, he wants to be liked and he loves to be chosen. He will work for a favor and he thrives on praise. But he still is sensitive to correction and may be embarrassed by it. This is the first year that he has himself well enough in hand to do things in a spirit of service. These episodes of doing "wonderful things" are infrequent, but they are stimulated by the child's feeling that so much has been done for him.

Not all NINES are as well organized as this. A number of boys at this age are wrapped up in themselves, very busy with their own activities, and very thoughtless of others; they are aggravated and can indeed be aggravating when their preoccupations are broken into. One gets on better with this type by planning ahead with him or leaving orders on a bulletin board.

Some NINES are anxious and apprehensive both about their work and about their health. They may underrate themselves as persons, lack confidence, and remark, "Oh am I stupid," or "I'm the dumbest." It is very important to make sure that NINE is not overplaced in regard to his school work for if he is, he will receive both his own condemnation and that of others.

One has to be careful, however, of taking NINE too seriously in regard to what he says. He tosses off self-critical remarks such as, "I would do that," "Oh that's my poor memory," or "Oh you know me and my dirt." He complains about many things but may forget what he was complaining about the minute after he has made the complaint. One naturally rides over much of NINE's complaining, but it is important

to judge whether or not any specific complaint has real meaning to him.

Sex

There is less interest in reproduction on the part of many NINES, if their desire for information has been satisfied at eight. Nevertheless, there may be much more continuing discussion of this subject with friends than parents realize. If sufficient information has not been given, the child usually shows his dissatisfaction. A mother can no longer stop with the explanation that a mother and a father marry and decide to have a baby. An alert 9-year-old will comment, "But you can't just decide."

Nine-year-old girls may relate themselves to their role in the process of reproduction. They may ask, "Have I got a seed inside of me?" Or if they notice that the mother is growing "fatter" they may ask, "Will I be that fat some day, too?"

Some NINES continue to think that the baby is born by Caesarian section. This is often easier for them to understand than the process of normal birth. However, birth of animals is taken quite naturally by the 9-year-old who has had familiarizing experience with animals.

NINE may be self-conscious about exposing his body. This awareness may be related only to those outside the family group, but NINE may not wish to have the parent of the opposite sex see him nude. If he is with a friend of his own sex, he may exclude a younger sibling of the opposite sex while he is changing his clothes, even though he might bathe with that same sibling on occasion.

His interest is more in the details of his own organs and functions than in those of the opposite sex. He may even seek out information, especially pictorial, in an encyclopedia or reference book. Girls

have usually been told about menstruation.

Swearing is now shifting from the earlier elimination type of vocabulary to sex allusions. Rhymes that children pick up at play have more pointed sex implications. They may repeat them at home to shock mother. Neighbors may complain about the kind of language used by boys.

The girl-boy interest persists with NINE even though there is now a marked separation of the sexes in play. The sexes are rarely mixed at a birthday party, and if they are, kissing games may result. NINES tease each other about girl and boy friends and about getting married. Often two boys have one girl, or two girls have one boy. There may be some writing of terse notes: "I hate so and so," "So and so really likes you," "I love you." Boys try to kiss their girl friend, with one success as the final goal. But all this playfulness has an impersonal, matter of fact quality without any feeling of jealousy even though you share your friend with a member of your own sex. A few NINES show obvious embarrassment about the opposite sex and try to avoid situations that expose their embarrassment.

§ 6. INTERPERSONAL RELATIONS

Most of the child-mother embroilment of eight has quite disappeared by nine. Even episodes of "arguing back" now may be infrequent. NINE is so busy with his own life that he makes many fewer demands upon his parent. Yet when his parent makes demands upon him he usually responds willingly and may even interrupt what he is doing without any resentment. But at times, when he is very much absorbed in what he is doing, he may not hear his mother's request. Therefore it is important to secure some

response from him to make sure he has heard your voice.

NINE needs a great deal of reminding. He forgets to wash his hands before meals, to brush his teeth, or to hang up his clothes. He accepts reminding willingly and usually acts on it at once.

NINE is less involved with routine chores, and accomplishes more tasks of the moment, both when asked and spontaneously. He wants to please his mother. He enjoys running errands and likes a commission to go to a place far enough away to require his taking a bus. He prepares a simple meal when someone is sick or when he wants to help his mother. Some boys are even protective toward their mothers and will not allow them to do certain difficult tasks, especially when they are pregnant.

NINE does not need the assurance of a reward for his helping. He is far less motivated by money than formerly. Even with his allowance, he may forget to ask for it and may be careless with it after he has secured it. NINE really wants to perform a personal service and may prefer a pat on the back for a job well done to a material reward, or even to praise. There are some jobs for which he may be interested to receive pay, but for other jobs like caring for the baby he may refuse to accept remuneration.

The mother no longer needs to be at home when NINE comes home from school, although a few NINES still need a note telling them where their mother is. Many NINES can have a key left for them and can take over the household for a short span before their mother's return.

It usually is not difficult to discipline NINE. Often he is controlled merely by a look from his mother. At times he may need a short isolation period especially from other children. He accepts it, and

soon returns a better child. NINE responds well to a warning or to an actual deprivation.

Father is not as actively demanded as he was earlier. NINE is so busy with his own activities and his friends' that he does less with his father except when they go on special trips together. NINE is often very fond of his father, enjoys discussing various things with him, and may be especially sensitive to any paternal criticism.

NINE does not as a rule present a problem with younger or older siblings. Usually he gets on well with his siblings and shows a real feeling of loyalty and will stand up for them as needed. NINE is especially good when he is made responsible for younger siblings for brief periods. He is then extremely understanding and without the strictness and sternness he exhibited at eight.

The tendency to have special friends, seen to be forming at eight, is stronger at nine. NINE chooses only a member of his own sex for a special friend. There is now overt criticism of the opposite sex. Girls may remark, "Boys stink," "too fresh," "too tough." Boys also have their say, "Can't be bothered with girls," and accept them only as a necessary evil.

Boy-girl attractions persist, but there is not much playing together. Often two boys have the same girl, or vice versa, without any feeling of jealousy. The boy's goal of conquest is to kiss the girl, and this becomes an episode to talk about.

NINES love to talk among themselves. This desire to chat even breaks into their more active types of play. Favorite topics of conversation are the bedtime hour, and radio programs.

NINE enjoys group play which shows a fair amount of organization. Informal clubs may last as long as two weeks or so. These clubs start out with a very real pur-

pose—press club, scrapbook club, paper club or sewing club. They are more elaborately set up than at eight and may include hideouts, codes, and a secret language and club bulletins. But these clubs do not last. Many NINES enjoy the formal clubs such as Cubs and Brownies under adult leadership.

Ball play of some sort is a sure organizer of groups and may take precedence over the earlier absorbing interest in radio programs.

NINE is quite natural in his manners. He excuses himself from the table, greets a newcomer often with a handshake, and thanks his hostess very easily and feelingly for the good time he has had. Parents may now enjoy watching their children perform rather than having to coach them from the sidelines.

§7. PLAY AND PASTIMES

In General

NINE demands little of his mother's time. He is extremely busy in his chosen activities. Much of his time is spent in solitary activities such as reading and listening to the radio. NINE wants to do endlessly what he enjoys doing. Boys play football until they are black and blue, or they coast until they are soaked to the hips. Girls play dolls or paper dolls the whole day through as they re-enact an entire day's routine including scoldings, taking their dolls to the doctor, and fairly complex interpersonal situations.

Baseball is a favorite outdoor sport both for boys and girls. Bicycling, roller and ice skating, swimming, sliding, skiing and coasting are enjoyed by both sexes. NINE is setting his mind to the task of improving his skills. He worked more spontaneously at eight, but is now acting more purposefully. But he does not yet

work with the ease and facility that he will show at ten. Even with his bicycling he complains that his legs get tired. Boys enjoy rough-housing. They are not as prone as formerly to play commando games. They enjoy lifting heavy objects.

The indoor life of the 9-year-old is fairly well planned. He has certain absorbing interests such as the radio, reading, or constructing with a mechano set. Some NINES enjoy making scrapbooks for hospitals. Others pore over maps and often draw them. NINE continues to enjoy card games.

Reading

NINE is a great reader. He may even appear to be living in a book world. He plans to arise early in the morning just to read. He rarely reads fairy tales now. He is too much of a realist and may say about fairy tales, "They're fantastic; they aren't true." The books he likes, he likes so much that he reads them over and over again. He is very fond of animal stories. The junior classics are now coming within his own reading scope. Repeated favorites are Tom Sawyer, Treasure Island, King Arthur and Bambi. Biographies, mysteries and the encyclopedia for reference all interest him.

Although he enjoys the classics he is still very fond of his comic books, which deal with adventure, war, and slapstick domestic humor. NINE usually has a pile of these books and enjoys trading them with his friends. With many NINES, however, the interest in comic books is beginning to wane, and can be broken into. They will accept the fact that any comic books outside of their own rooms will be confiscated. When, on the other hand, the interest becomes so absorbing that it interferes with school work, sharp measures may have to be taken, for comic books

can have the attributes of a drug. This more drastic handling, however, is seldom necessary and even when indicated, the child should not be entirely forbidden comic books. NINE gets what he wants and becomes proficient at sneaking them into the house or reading them out of sight of his parents if he is not allowed to read them in his room.

Music, Radio and Movies

If a child at this age persists in his interest in taking music lessons, one may expect that he will really apply himself. Many NINES can practice by themselves, although they still need to be reminded. The child is becoming interested in correct fingering. His touch is lighter and staccato which gives him better control over the sounds he produces. He is beginning to enjoy his accomplishment of playing and fortunately his playing has improved so that his family can enjoy his music. Biographies of composers interest him.

NINE knows the time and station of radio programs by heart. The detective and mystery serials are becoming more important to him although he still may cling to a selected few of the adventure stories, and he continues to enjoy the domestic life serials, quiz and information programs and adult comic programs. A few NINES listen to the news. Happily the child is not as rigid and intent on his programs as he was earlier. He can even miss an occasional program if some more interesting activity offers. NINE is becoming more aware of the advertising on radio programs and even though he has been warned against it by his parents he may finally succumb, buy the product advertised and send in the necessary box tops for his reward.

Radio programs provide one of the

topics of conversation for the 9-year-old. NINE tells what programs he listens to and compares them with the programs reported by his friends.

There are marked individual differences among NINES as to interest in movies. Some like to see their "type" of movie off and on, and if they see one which they especially like they may want to see it over and over again. Others go to the movies weekly, are conversant about the actors and may even write to them.

§8. SCHOOL LIFE

NINE enjoys school. The morning routine of getting ready for school has smoothed out. He has better control of time and is now responsible for getting himself to school on time. He has trouble, however, in remembering to take his school material to school even though he has planned ahead and put his things in a convenient place. He still needs to be reminded. Parents should not be aggravated by this lag. They should remember how well he is getting himself ready and allotting his time. If he takes a gun or a ball to school he will readily respond to his teacher's request to leave it in the dressing room.

NINE reports more about home and outside activities at school than he reports school happenings at home. He tells a long detailed, strung-out story at school about his radio programs or some movie he has seen. He is most apt to report on his subjects at home; which subject he is best in; who is ahead of him, etc. He will also tell about a school play or some special event. He does not talk much about his teacher but may describe some of her mannerisms such as how she talks or how she does a certain thing.

Teachers report that fourth is a diffi-

cult grade to teach. The teacher needs to realize that NINE is an individualist, that he has rather positive likes and dislikes. NINE wants to be independent of his teacher, but in his dealings with her he wants her to be reasonable and resents any decisions that he considers unfair. The teacher soon recognizes that she delays in helping him until he really needs her. NINE is actually more related to his subjects than to his teacher. Dislike of a teacher may be linked to a dislike of a subject especially if the child has more than one teacher. He may even blame the teacher for a lowered grade.

Because of these more emotional responses it is very important to be sure that he can handle the more self-demanding tasks of fourth grade. NINE is afraid of failing and is also ashamed of having failed. Need for repetition of a grade or going at a slower pace are best taken care of within the first three grades when the child does not become as emotionally involved and usually improves by the removal of too high demands. He is happier with the group which will allow him to operate at his optimal level rather than his minimal level. Parents are the ones who feel the emotional pangs of failure within the first three grades and wrongly ascribe their own emotions to the child.

The change from third to fourth grade is a crucial one. Many who have been developing on the slower side with some support to hold a place (such as a "reading" or "arithmetic disability") may now have a real spurt of improvement. Some who have previously done well may now need individual help.

In the classroom NINE appears to be more orderly and performs with greater dispatch. Each child has his own individual manner of entering the room. One child tosses his book on his desk, another

slams it down and a third places it carefully. A few may need a word from the teacher to stir them on their way, but once the class is started they take out a book, make a comment or two about the task, and set to work. NINE has a greater capacity for working independently both of children and of teacher. He is challenged by a task. He sits with trunk bent forward, resting on his elbows, hands propping his chin as he brings his face near the book on his desk. At times he throws himself way back, extends his whole body and holds the book at full arms' length. He flings his arm forward or backward to call the teacher's attention, usually without calling her name, and awaits his turn. He may look at his neighbor's work but prefers the teacher's assistance. He has less need than EIGHT to verbalize and also can talk more quietly. The classroom is therefore quieter. When he drops his desk top down with a bang, he may give his neighbor a glance as though expecting him to complain. On occasion he sits with wide open eyes, stares forward, apparently fixating without regard and seems to be in a daze. At the end of a period there is a general stir; some children rush to leave their papers on the teacher's desk, while others remain at work until they have finished. On some occasions the whole class becomes so interested that it remains overtime to continue with a discussion or lesson.

NINE is interested in achieving in his school subjects, and likes to be graded in them. He is anxious for good marks and works for them. He can be discouraged by failure. There is considerable competition with others and he may show resentment if surpassed by one who is close to him in achievement, or he may be impatient with a duller classmate. When failing he usually needs individual atten-

tion rather than isolation. He also often competes better as a member of a group than as an individual.

NINE has a better critical evaluation of his own abilities. He can describe his preferred method of working. He knows he can do a problem better if he writes it down; that he can do arithmetic combinations better with flash cards than orally. Some say they cannot maintain meaning when they read aloud. Some tasks are better performed at home than at school.

Complaining comments may precede any task but soon fade out. NINE has a certain amount of self-discipline. Faced with an unpleasant task, if told how much he is required to do and about how long it will take, he proceeds without further ado. He is speedy in his work and if he is given a goal he rushes to get there.

"I haven't a good memory" is one of NINE's favorite complaints. Immediate recall is not always easy for him. He may remember better if he writes an item down or if it is written down for him. Once his mind is made up, however, he is not easily influenced to change it. He can evaluate his performance: "This one I'm not too sure. This one I am sure."

In reading he may prefer to read silently and may dislike to read orally before the group though he still needs to be checked by oral reading. He tackles any word and is not too concerned if he does not know the meaning unless it is important to the story. Reading is now associated with several subjects. Those who have been slow in learning to read can now join the group in their favored subject. NINE especially likes to read for facts and information.

Handwriting is now put to practical use. Perhaps he keeps a diary. He writes lists, cataloguing his collections. He likes to order things by mail. "Business" letters

hold more interest than do social ones. One 9-year-old made out a form letter which she used to acknowledge her Christmas gifts. NINE likes to copy. This is his way of supporting his "poor memory." When he looks up a subject to write about he is truly a plagiarist.

Penmanship, particularly in girls is smaller, neater and done with less pressure. Boys usually still write with heavy strokes. Most use finger movement with tension of the forearm. The 9-year-old ordinarily sustains his writing long enough to complete a given task. However, some children may continue to avoid writing any more than is necessary. NINE is also critical of his writing: "Sort of sloppy isn't it?" "That's my most careless thing." He may even copy his own paper to make it more legible.

Arithmetic is perhaps the most talked of subject in fourth grade. It is "loved" or "hated," but despite the latter emotional response NINE may do well in this subject. He may fluctuate in his like and dislike from day to day according to his accomplishment and grasp. He now knows many number combinations by heart and is aware of the ones which cause him difficulty. He writes these down and wants to master them by having someone call them off to him. He usually prefers written to oral work. Though he likes to prove his long division, he does not yet check his own error spontaneously. He wants to know how he made his error and enjoys analyzing his process with his teacher to determine how he made his mistake. The teacher in turn needs to know how his mind works and to think less about correct or incorrect answers. He may be close or far from the correct answer.

NINE often has more spontaneous interest in problem solving than his school work affords. He becomes interested in the

prices of things and figures out many practical problems related to numbers which he encounters in reading or conversation.

Although individual differences appear to be strong, NINE uses the pronoun "we" to identify himself with the classroom group. A comment such as "I wish we could do reading workbooks all day" brings an echo in unison from the rest of the class. At times the whole class will muster a sudden spurt in order to finish a task.

Friendships are being formed. NINE chooses a best friend to work or play with. He protects and defends him on occasion. There may be a definite shift in twosomes. Some who have played together off and on during the earlier grades may form completely new friendships. Also two children who have had difficulties getting along together now suddenly become friends. Boys form stronger twosomes and also act as a group more than and two-, three- and four-somes often girls. Girls are more varied in their groups exist. Boys and girls now play separately for the most part, and there is exclusion of the opposite sex in play. The adult is rarely included or referred to in their play. However, they do enjoy a group game supervised by an adult.

§9. ETHICAL SENSE

NINE is, as a rule, responsive to any demand put upon him if he has heard it. His hearing may be related to his absorption in what he is doing, but it also may be related to his interest in and willingness to do the task required. His response often has the quality of a rapid flash. If he acts upon it immediately he "clicks" in the demanded direction. But if he delays he is apt to forget and then needs to be reminded. He takes reminding with good grace. NINE's intentions are often

higher than his acts. He really wants to be helpful, to relieve his mother, but he lacks spontaneity in doing things. He is, however, feeling the demands of his age which bring him more privileges and more responsibilities. Although there are fewer battles over chores at nine, if too much is demanded of NINE (especially a boy) he resents it and speaks out his mind. Most NINES are so busy that they have little time for chores. Fortunately NINE responds well to immediate little demands and these usually take the place of chores.

The drag and uncertainty in making up his mind which he experienced earlier are no longer evident. NINE makes up his mind rapidly, definitely, and often to his parent's satisfaction. His decisions often are easily made and almost automatic. He also shows a considerable degree of fore-thought for he can set his mind to a task and can thus carry it through to completion.

NINE accepts blame fairly well when it is due him, but he becomes very much upset if blamed for something he has not done. At times he becomes involved in some group activity which he did not start, but circumstantial evidence points to him as the responsible party. Evidence should then be sifted by an adult so that each child may take a just share of blame, and not leave him "holding the bag." Fairness is NINE's credo. He can always be appealed to through fairness. He may even be so realistic about it that he will not accept praise that he thinks is not his due even though he likes praise very much. One 9-year-old refused an award in a public speaking contest because he felt it should go to his mother, since she had helped him to learn the poem he recited.

The rudiments of a conscience are developing in NINE. This does not, however, mean that NINE never blames or alibis.

He might even blame his difficulties on his piano lessons. If he is in a tight spot he is capable of making quite plausible excuses. He would often alibi if permitted but he can be held to the evidence of the truth.

NINE has less need to want to be good than he did when younger, for now he is good more naturally. He may be more concerned about the things he has not done than the things he has done. He thinks in terms of right and wrong. He says he is ashamed that he is failing in school or that he does not eat well. He may even say that he "feels guilty" because he has neglected to return some thing.

His are becoming the errors of omission as well as of commission. If he has committed some wrong he feels the need to confess to his mother. He does not come straight to the point but approaches her considerably. He watches his mother's face. He does not want to offend her, so he breaks things to her easily. But if he does not confess, his conscience, young as it is, may bother him.

NINE is relatively easy to discipline. He does have to be reminded a good deal. Hanging up his outside clothes and his pajamas, and tying his shoelaces should no longer require reminders. A fine for each forgetting brings him into line with amazing speed. Isolation is needed at times, and denials of favored activities such as movies produce the desired result. Often a mere threat of denial or some very small denial is sufficient. One does not have to be drastic with NINE. Most NINES accept punishment with good grace though a few become extremely resentful and express their feeling with, "That's a gyp." A few NINES, who are obviously riding for a fall and cannot be helped to bypass their difficulty, respond well to a re-trial. In the midst of their tears they

are eager to start all over again and do it right on the second trial.

NINE is beginning to be neater about his room. He may even be particular about his own things and spends hours sorting out his numerous possessions. He responds well to his mother's reminders and can carry through a task on his own.

The words "honest" and "truth" are now becoming a part of NINE's vocabulary. Even when he exaggerates on occasion he rapidly sets things right by saying, "Oh Mom, you know it isn't real." NINE rarely takes things not belonging to him and if he does he wants to return them and set things right. He is now developing a sense of ethical standards and means to live up to them.

Most NINES are no longer intrigued by money as they were at eight. Some handle money very well, even budget it, lend it, and carry around a fair sum in their wallets. Some do work in return for their allowance, others have a basic allowance and supplement it with pay for tasks. Yet it is surprising to see how many NINES forget to ask for their allowance and leave it lying around after they have received it. Many would prefer to receive money as they need it, for their needs are as a rule small and immediate.

§10. PHILOSOPHIC OUTLOOK

Death and Deity

NINE, the realist, often shows a marked lack of interest in God and religion. He also no longer believes in Santa Claus and does not enjoy fairy tales. He may refuse to go to Sunday School and to say his prayers. Church schools may anticipate a marked reduction in the attendance of 9- and 10-year-olds. With some the social aspect of Sunday School still holds interest. And with others a true religious feeling persists and grows. NINE may even

pray spontaneously if he is in great need. He may have the rudiments of faith and an ethical feeling that it is important for him to do certain things.

Although a few NINES may be concerned about the soul and its separation from the body, death is usually thought of more closely in connection with the process of dying. NINE is interested in how you "stop breathing" and have no pulse, and in the fact that you are "not living." NINE may say, "Oh I wish I'd never been born" or "I wish I were dead" but he does not mean these remarks seriously. As with so many of NINE's complaints one has a justified tendency to treat them lightly, because for the most part they are very transient.

Time and Space

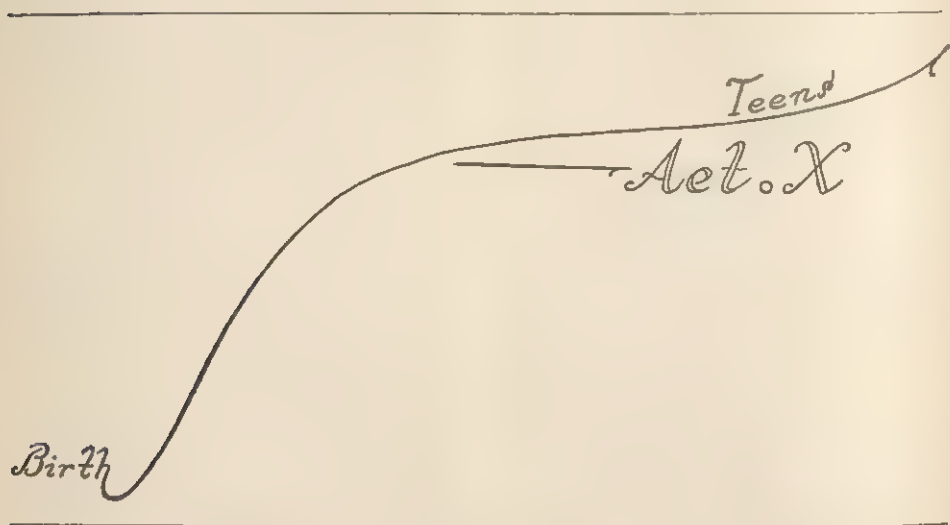
NINE is more controlled by time than controlling time. His day is filled to the brim with things to do. He is going here and there and has difficulty in finding time to do extra things which may be requested of him. Everything he does is important and therefore anything is difficult to give up.

NINE does control time, however, in that he plans his day and knows what follows what. In his race with time he may set his alarm clock for early morning rising either to gain time for reading or to enjoy the leisure of an extra hour's sleep.

His handling of space involves the same type of restriction and specificity as his response to time. He goes to a special place by himself: to the doctor's office, to the dentist's office or for his music lesson. He handles this well even though his destination can only be reached by some public conveyance. But one does not divert him by demanding an extra errand on such an occasion. One thing at a time fully accomplished is NINE's set goal.

10

TEN YEARS OLD



BEHAVIOR PROFILE

TEN, like five, is a nodal age. Both ages bring to partial fulfillment the trends of immediately preceding development; but ten much more than the age of five suggests a latent future. A typical 5-year-old is so self-contained and self-adjusted that he might almost seem to be a finished product. The environment scarcely has any separate existence for him; it is virtually an extension or an appurtenance of his well-balanced self. A typical 10-year-old, likewise, is in good equilibrium, but he is so adaptively and diversely in touch with the adult environment

that he seems rather to be an adult in the making. Indeed his individuality is now so well defined and his insights are so much more mature that he can be readily regarded as a pre-adult or at least as a pre-adolescent.

FIVE is a neutral as well as nodal age. Not so TEN. At ten years, sex differences are pronounced. The psychology of a 10-year-old girl is significantly distinguishable from that of a 10-year-old boy of equivalent breeding and experience. The girl has more poise, more folk wisdom, and more interest in matters pertaining to marriage and family. This difference appears to be fundamental. Under current cultural conditions other sex differences become obvious; but they need not be taken into account in a general behavior profile.

The distinctive characteristics of the ten-year level are best interpreted in terms of the maturity traits of the 9-year-old. NINE, as we have seen, is earnestly engaged in mastering skills; he works with channelized intentness and is not too easily diverted from one activity to another. He is in a more or less constant state of urgency, as though in contest with Time. In comparison TEN is relaxed and casual, yet alert. He has himself and his skills in hand; he takes things in his stride; he works with executive speed and likes the challenge of mental arithmetic. He often shows a genuine capacity to budget his Time and his energy. His general behavior, his demeanors, his orientation to the household are more modulated.

This greater self-possession shows itself in many ways. Having consolidated certain visual, manual and laryngeal skills, he can attend to a visual task, and at the same time maintain conversation. NINE may have to stop at such a task, in order to talk. For similar reasons TEN is more capable of little courteous amenities which have a motor basis. Since his whole organization is less channelized his attitudes are more flexible, and he is more responsive to slight cues.

This relative fluidity has important cultural implications. It makes the 10-year-old peculiarly receptive to social information, to broadening ideas and to prejudices, good and bad. It is relatively easy to appeal to

his reason. He is ready to participate in elementary discussions of social problems,—racial minorities, crime, the relationships of management and labor, the black market etc. Parents often fail to sense the social intelligence of the 10-year-old child. Sometimes they treat him as though he were only eight years old; or they maintain a certain intellectual aloofness which prevents them from organizing his thinking. Yet this is a golden period for planting liberalizing ideas.

Perceptive teachers are aware of the great power which they can wield through suggestion and through the social science studies of the fifth grade, studies which touch the fundamentals of the Four Freedoms and the conditions of human welfare. Social workers also are aware of the critical importance of this age period in the lives of neglected children. The channelized characteristics of the 9-year-old, and the fluidity of the 10-year-old readily lead to bullying and delinquent forms of behavior in an adverse environment. A gang simply organizes these traits for better or for worse.

It is said that the 10-year-old sometimes esteems his gang or his club more than his family. This may be partly true; but on the whole, he has a fairly critical sense of justice. He is cognizant of partialities, and frequently surprises you with the judiciousness of his observations. He sizes up his parents and compares them freely with the parents of his playmates. Many of his comparative judgments are secret; others are expressed. Ask him to describe his teacher and you will get a candid portrait: Miss A. "She's reasonable; she yells a lot, too, but she's really very nice!"—Miss B. "She doesn't like some kids. One kid she doesn't like at all!"—Miss C. "She's pretty big and she has sort of yellow-blondish hair. She never stands up straight. She walks like this." The 10-year-old is evidently aware of individuality in others as well as in himself.

Individual differences, apparent at nine years, become still more manifest at ten. The 10-year-old gives a fair indication of the man (or woman) he is to be. Talents now declare themselves, particularly in the realm of the creative arts. Giftedness in personal-social behavior also

reveals itself, if we take pains to read the subtler emotional patterns of the child. He may show fineness of character, graces of deportment, executive ability, perceptiveness of interpersonal relationships, and a wide range of personality traits which have great prognostic import as to his potential vocation and career. In the management of interpersonal relationships he may already show a kind of skill and a sense of justice which signify capacity for leadership. All special skills should be recognized, not for purposes of pre-vocational training but for reasons of psychological hygiene.

A democratic culture will naturally place a premium on all kinds of skill. The schools continue to bestow excessive emphasis on academic skills. The non-verbal child with mechanical skills, however, should have ample opportunity to exercise them and to give them socialized expression. The exercise of skills with social approval serves a valuable double purpose. It serves to strengthen that self-respect and self-confidence which is so important in meeting the perturbing demands of adolescence. Simultaneously, society thereby protects itself against the delinquencies of adolescence. Cultural planning for the teen ages should begin at ten.

The 10-year-old will respond to such planning. As already noted, he takes kindly to liberalizing ideas of social justice and social welfare. Although critical, both of self and of others, the 10-year-old is capable of loyalties and of hero worship, and he himself can inspire it in schoolmates. He can be readily inspired to group loyalties in his club organizations. He likes the sense of solidarity which comes from keeping a group secret, as a member of a group.

Girls and boys alike have a certain fondness for secrets. It seems that in some esoteric way a shared secret intensifies both the private sense of self and the identification with another self. So in radio, movies, comic strips and pictorials, we find that the 10-year-olds like mysteries, conspiracy, practical magic and hero worship. Comics still hold sway with some children, but are losing it with others.

Romance and love in the cinema are spurned, at least by the boys

There is not much companionship between the sexes. They keep apart by intermittent feuds and separatist truces, but they also enjoy group games of one sex against the other and the formal situation of dancing school. Boys express their camaraderie with other boys in wrestling, shoving and punching each other. Girls as pals walk with arms about each other. There is much gossiping in and out of school, among school-mates, with writing and exchange of more or less complimentary notes. Girls are prone to write notes to other girls. True to the secretive-in-group tendency characteristic of the age, the notes are often phrased in cryptic terms understood only by those "in the know." Most of this surreptitious activity is superficial, innocent and spasmodic. It does not result in permanent resentments and enmities. It seems to serve a psychological necessity, if not a constructive function.

When two or three girls foregather with their assorted paper dolls, they dramatize many life situations, in whispered secrets or in outspoken dialogue. By using the dolls as concrete symbols, or by staging plays, they explore the whole family structure, including engagements, brides, weddings and the rearing of children.

Girls are more aware of interpersonal relationships than boys are. They are more aware of their own persons, their clothes, and appearance. They may spend prolonged periods preening a coiffure. At the same time, they are more discerning of their individual relationships with others. If a younger child giggles at the movies, her companionship is spurned. More than boys, girls are interested in family life and they are most perceptive of differences in family living. A less favored child may inspire sympathy and a desire to help.

By such precursor signs girls, and to lesser degree, boys of ten give evidence of approaching adolescence. Too little is known about the concrete steps whereby these children will reach ultimate maturity. Ten years and more of adolescence lie ahead.

The mechanisms of development during those years will not change. The increments will come slowly and often painfully. Endocrine changes will bring about new physical and mental manifestations. But

the patterning of behavior will remain a gradual process of architected growth.

Just as the equilibrium of age five gave way to the impulsiveness of five-and-a-half and the creative thrusts of six, and as these in their turn gave way to the subjectiveness of seven, the expansiveness of eight, the self-motivation of nine and the re-orientation of ten, so the eleventh and twelfth years will lawfully manifest themselves in distinctive shapes of behavior. And likewise, each year of the teens and the early twenties will bring forth its characteristic behavior shapes. The psychology of adolescence remains yet to be written, because the morphology of the growing behavior patterns has not been studied in concrete detail.

The culture cannot do justice to the psychological needs of the adolescent without a more realistic knowledge of development as a morphogenetic process, that is a process which produces lawful shapes and configurations of all behavior,—motor, adaptive and personal-social. General dynamics cannot explain the progressively changing structure of the adolescent mind.

The changes are in essence comparable to those which we have described for infancy and childhood. The foundation and most of the framework of the human action-system are laid down in the first decade. The consolidations of those first ten years will not be sloughed off. They will remain an integral part of the action-system of the maturing youth. The teens do not transform the child, but they continue him. Herein lies the preventive and the hygienic significance of infancy, the pre-school years, and the years from five to ten.



PART THREE



*There was a child went forth every day,
And the first object he look'd upon, that object he became,
And that object became part of him for the day or a certain part of the day
Or for many years or stretching cycles of years.*

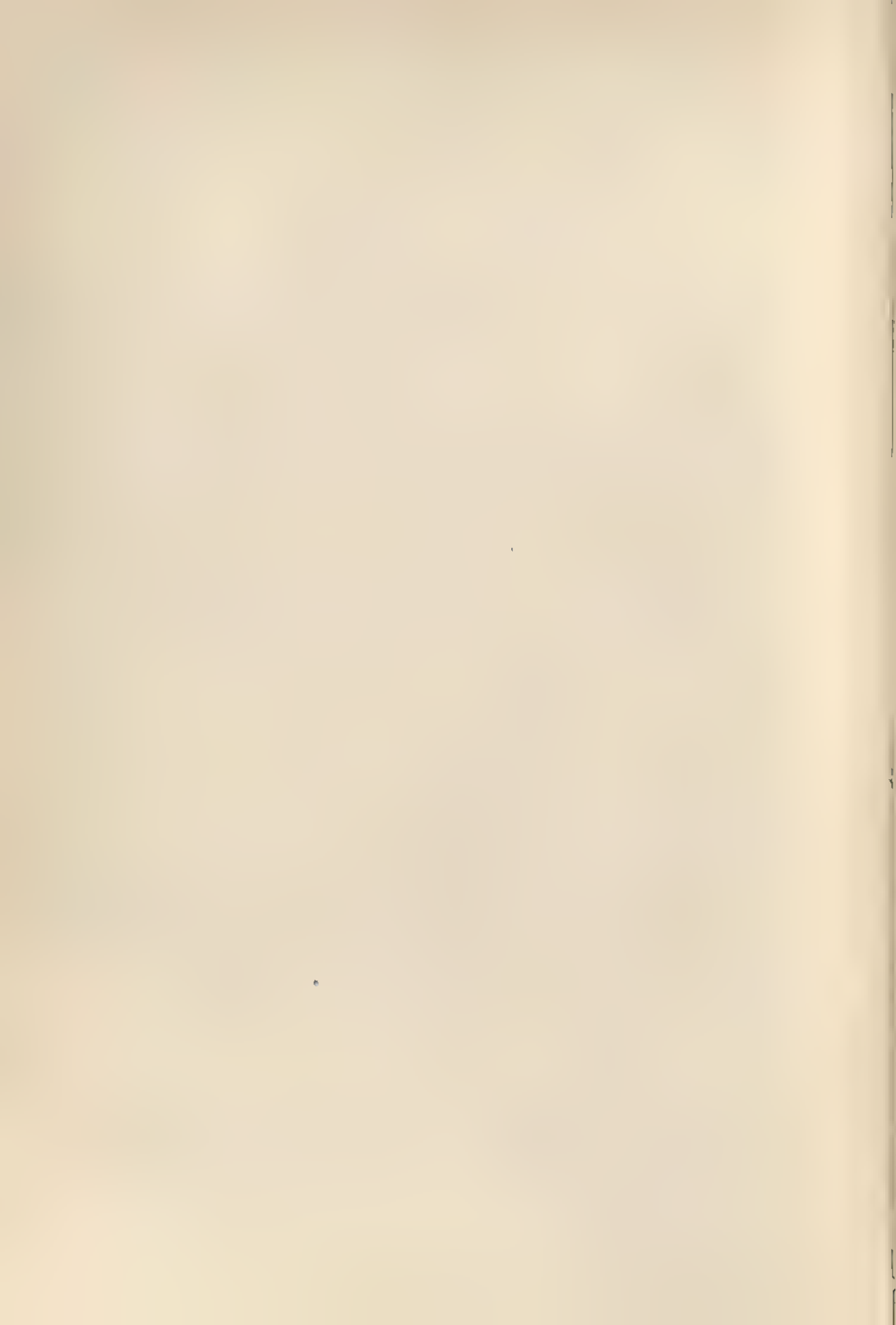
*The early lilacs became part of this child,
And grass and white and red morning-glories, and white and red clover, and the
song of the phoebe-bird,
And the Third-month lambs and the sow's pink-faint litter, and the mare's foal
and the cow's calf,
And the noisy brood of the barnyard or by the mire of the pond side,
And the fish suspending themselves so curiously below there, and the beautiful
curious liquid,
And the water-plants with their graceful flat heads, all became part of him. . . .*

*His own parents, he that had father'd him and she that had conceiv'd him in her
womb, and birth'd him,
They gave this child more of themselves than that,
They gave him afterward every day, they became part of him.*

*The mother at home quietly placing the dishes on the supper-table,
The mother with mild words, clean her cap and gown, a wholesome odor falling
off her person and clothes as she walks by,
The father, strong, self-sufficient, manly, mean, anger'd, unjust,
The blow, the quick loud word, the tight bargain, the crafty lure,
The family usages, the language, the company, the furniture, the yearning and
swelling heart,*

*The strata of color'd clouds, the long bar of maroon-tint away solitary by itself,
the spread of purity it lies motionless in,
The horizon's edge, the flying sea-crow, the fragrance of salt marsh and shore mud,
These became part of that child who went forth every day, and who now goes, and
will always go forth every day.*

—WALT WHITMAN



PART THREE

ORIENTATION

THE Behavior Profiles, assembled in PART TWO furnish cross-sectional views of the ascending stages of maturity from five to ten years. PART THREE assembles the Growth Gradients, which are implicit in these stages. But the life career of the child does not begin at the age of five years, and to get a clear view of the trends of growth, the gradients must begin with infancy. The following ten chapters therefore group the growth gradients from birth to ten years in ten major fields of behavior. Special attention is, of course, given to the period from five to ten, but the earlier period is treated in sufficient detail to show the developmental continuities.*

For convenience, each gradient consists of a series of levels arranged by weeks, months or years. This does *not* mean that the itemized gradient levels should be regarded as statistical age norms.

The parent who reads a gradient should never say my child *ought* to be at this particular level of the gradient because he is old enough. The child may well be younger or older than the chronological age assigned by the gradient. It is more important to find the gradient-level which approximately describes the stage of maturity which he has actually attained. The gradients are intended to show the overall

* Further details on the period from birth to five may be secured from the following volumes: Gesell & Ilg: *Infant and Child in the Culture of Today* (Harper); Gesell et al: *The First Five Years of Life* (Harper).

THE CHILD FROM 5 TO 10

10 years

9

8

7

6

5

School

4 years

3

2½

2

1½

1

40 weeks

28

16

4

0

Birth

Pre Natal

Period

Philosophic Outlook
Ethical Sense
School Life
Play and Pastimes
Interpersonal Relations
Self and Sex
Fears and Dreams
Emotional Expression
Personal Hygiene
Motor Characteristics

Over 40 areas of Behavior in 10 major fields of Child Development are tabulated in GROWTH GRADIENTS for progressive age levels from birth to 10 years .

developmental *sequences* of behavior rather than rigid standards of expectancy. Individual differences are too great to permit rigid standards rigidly applied. Generous allowances should be made for age variations.

Nevertheless, the gradient-levels are *location points* which help to give us bearings. They indicate, suggestively, the kinds of behavior which precede; and still better they indicate the kinds of behavior which are likely to follow in due course. This orientation, this *forward* look, provides perspective and usually affords cause for optimism. The gradients are not designed to *rate* the child; they are designed as tools to aid interpretation. They are rough charts to sail by.

Each of the chapters of PART THREE is followed by a group of gradients in tabular form for ready consultation. The introductory discussion interprets the general significance of these gradients in terms of child development and of child guidance. No attempt is made to consider specifically each separate item of a gradient. Many of the items have already had concrete mention in other connections. The emphasis is on growth trends over a long reach of time. We are concerned with the developmental philosophy of the behavior under discussion,—the nature of the behavior from the standpoint of maturity, the import of the behavior from the standpoint of the culture. In last analysis the culture consists of home, school and community. So we naturally have had teachers as well as parents in mind in writing these interpretations. We make repeated references to the individual differences among children (and adults) to protect the gradients from arbitrary application

MOTOR CHARACTERISTICS

MOST of the readers of this book, to say nothing of the authors, are especially interested in problems of child personality. But one cannot make a frontal attack upon the psychology of personality; because personality is really the sum and resultant of all possible forms of behavior. So one must approach the subject from several angles, which are represented by the titles of the ten chapters in **PART THREE**. Naturally we begin with the child's motor characteristics, because the very core of his physical and practical self is muscular.

All told he has over 600 distinguishable muscles. Most of them are firmly attached in symmetrical pairs to the skeleton with its elaborate

apparatus of joints and levers. Anyone who has tussled with a lively pre-school child knows the versatility of that apparatus. The complexity of the muscular system is beyond imagination, because a child has some 40,000,000 muscle fibers, each of which, in turn, is made up of an immense number of microscopic fibrils, and they in their turn are linked up with nerve fibrils which receive impulses via a veritable jungle of nerve cells in the brain and spinal cord. Because of the myriad of nerve connections the muscular system is really a neuro-muscular system.

Considering its vast complexity, is it strange that it takes literally a score of years to organize this system? Most of the organization takes place in the first ten years of life, and proceeds with an orderly sequence suggested by the gradients of growth. The process of organization really begins before birth, when the deep spinal muscles of the trunk come into action. These muscles are very ancient in the evolutionary history of the race. They antedate even the muscles which move the fore limb and the hind limb. In general, the development of the massive fundamental muscles is basic to that of the finer accessory muscles, such as those which wag the tongue and fingers, purse the lips and move the eyeballs.

But Nature cannot wait until the birth of the child to lay down the primary networks for the coordination of the neuro-muscular system. Accordingly, as we have already seen, even the unborn baby is capable of making movements and of striking attitudes. Some of the movements involve the gross muscles, many involve the fine. The total amount of activity which takes place during the fetal period is considerable; and if we had the requisite information we should find that this activity is already predictive of certain motor characteristics which the child will display in later life.

Soon after the baby is born he assumes active postures which involve eyes, head, arms, legs and trunk. His eyes, which moved intermittently under closed lids while he was still in utero, now assume a fixed posture as he stares at some object. He holds the posture by means of his

twelve oculo-motor muscles. These are so tiny that they could go into a thimble, but they are in many ways the most important muscles in his entire body. They have extremely extensive connections with millions of nerve cells (neurons) in the brain. Through these cells the eyes are brought under voluntary control, and they are also brought into association with countless muscle fibers in other muscles.

The eyes acquire their own skills; they also acquire directional skills which are built into the skills of other muscle groups. Having "learned" to hold a posture, the eyes learn to move right and left, up and down, and oblique-wise; they learn to converge, to follow a moving object and to rove in exploratory inspection. In a few years they make hop-skip excursions across the printed page of a book which the reader holds in his tight hands.

This remarkable feat which needs the coordination of eye-head-hands-and-body postures had its humble developmental beginnings in the tonic-neck-reflex of early infancy. The t-n-r (for short) is both a static and dynamic posture. In its most typical form the baby lies supine, head turned to the right, right arm extended, left arm flexed. In general outline this activity bears resemblance to the stances assumed in fencing, boxing, creeping, walking, throwing, golfing and violin playing! In all these motor skills the action-system must strike asymmetric as well as symmetric attitudes in order to maintain poise and to make progressive movements.

At first the infant gazes rather vaguely in the direction of the extended arm; but in two or three months his eyes "pick up" his moving fist, and he begins to look regardfully at his hands—an event which marks an epoch in his mental growth. Later he looks at an object held in his hand; he seizes an object on sight and inspects it. All of this preparatory to the supreme achievement of holding a book simultaneously with eyes and hands,—and perhaps even lifting the head a moment to smile at the teacher. But if the teacher is wise she will not expect the latter amenity too early.

The complexities of postural control are well borne out in the

development of throwing,—a motor skill which was of life and death importance to primitive ancestors, and which figures prominently in the play activities of child and adult. Well defined casting begins at about 15 months when the baby is perfecting his capacity to let-go-of-a-hold. Safely seated in his high chair he takes great delight in casting one object after another overboard. His oculo-motor muscles are alert enough to follow through as the objects fall,—a very important visual skill, basic to the eye movements of reading.

At 18 months he can cast while standing; but his throw is a crude forward thrust, and he toddles both before and after the throw. He is nearly four years old before he acquires a definite standing stance for delivery. His leg work, however, is still immature. He tends to use his right foot as fulcrum, and to twist and lean awkwardly with his trunk. At five years he advances with the left foot, shifts weight to the left foot on delivery, releasing the ball when the arm is in full extension. As in so many other behaviors, the 5-year-old prefigures the adult. He shows many of the elements of mature throwing. Boys throw much farther and more accurately than girls, and are obviously more masculine in their style of delivery. Here is a constitutional sex difference in behavior which can scarcely be ascribed to cultural factors. The sex difference becomes evident well before the age of four.

Primitive man not only hurled missiles; he also struck blows with a cudgel. After toss-ball comes bat and ball. Batting requires a higher order of coordination on the part of the eyes, hands, fingers, body posture and feet. Nimble shift of stance, instantaneous perception, accurate timing and flash flood release of energy are demanded. The 6-year-old makes swat-like strokes at the ball from a rather stiff stance; the 10-year-old makes a creditable swing with promising foot work. Batting form during the years from five to ten improves perceptibly, not merely because practice makes perfect, but because the total neuromuscular system of the child undergoes progressive growth changes. Similar changes affect numerous motor aspects of his school work.

Crayon and pencil require more delicate handling than bat and ball.

The manipulation of graphic tools is highly dependent upon motor maturity. Details will be given in the chapter on School Life (Chapter 18), in connection with the growth gradient for writing. Here again the general form of the motor activity varies with age and with inborn ability, rather than with exercise per se. This accounts for the fact that children at one stage will prefer bold and free flowing strokes with crude crayon; and at another stage, they will enjoy circumscribed finer strokes with pencil. Speed and accuracy also show a tendency to vary with the current maturity of the neuro-muscular system. The 7-year-old doodles, the 8-year-old likes to be timed for speed of performance, the 9-year-old tends to write at top speed without special regard for neatness. Such variations are entirely normal; and if we understood them better, we should not place as much stress on straight line progress in the acquisition of motor skills.

Inasmuch as maturity is such a fundamental factor in determining the motor traits of growing children, we should expect distinguishable differences in the general motor deportment of the various grades of an elementary schoolroom. To be sure, much depends upon the freedom of movement allowed to the pupils. If they are restricted to fixed positions at fixed desks, we should have to observe the tensional outlets of the children,—the ways in which they wiggle, squirm, tap, grimace, etc. Such tensional behavior affords good clues to the motor maturity of a child. But if the atmosphere and the equipment of the room allow a normal degree of freedom, we get a truer picture of the motor characteristics of the children.

In the *kindergarten*, the typical 5-year-old may move from one locus of interest to another, making a transitional contact with the teacher. But when he gets to an area of choice, he stays there for a prolonged period, working smoothly. He is moderately aware of the whole room in his play, relates readily to his teacher, is not disturbed by a visitor.

The motor demeanors of the *first grade* are significantly different. The set-up and the atmosphere of the room are more fluid. Materials are less in evidence. The typical 6-year-old frequently moves from one

locus to another. Indeed he seems always to be in motion. Even when he settles down he keeps on settling, continually shifting his posture and sketchily manipulating the material with which he is engaged. He does not build a tower or wind thread on a bobbin as smoothly as he did a year ago. He seems to be over aware of the contexts of his task, and too ready to move to the next task.

There is less scatteration in the *second grade*. SEVEN settles down for longer periods, narrows down to the task in hand, and shows persistence even in the finer use of pencil and scissors. When restless he may push his desk, but he can remain on location better than more mercurial SIX. He is interested to finish his task; if he moves about it is more typically for a round trip to his teacher.

EIGHT is still more sedentary. There is less moving about in a *third grade* room. Performance is more even, group cohesion more evident. The room looks neater, and if it gets out of order from group activity it is quickly put back in shape by group action. The individual children are more poised and self-dependent. There is less opening and closing of desks and fewer round trips for teacher contact; and more communication by an eager raising of the hand in a modified and agitated t-n-r attitude.

The *fourth* and *fifth grades* are more business-like. The pupils remain seated for a much longer period; but for some developmental reason or other, postural proprieties have slumped. A typical 9-year-old raises his hand at the end of a flail-like arm which is so flaccid that it is often supported by the free hand! Perhaps, for temporary developmental reasons, his energies are draining from the proximal spine to the distal precinct of the fingers; for he has a new interest in speedy but skillful performances which require fine coordination. At any rate, if an immature 9-year-old should be in the group, he might give symptoms of his immaturity in his motor demeanors and motor deportment.

The motor characteristics of a child are worthy of observation because they are indicators both of individuality and of maturity status.

By the age of nine a child acts like himself. He reveals his psychomotor makeup in the way he comes into the schoolroom, and in the gestures which he makes under tension or excitement. Nutritional and environmental factors should always be weighed; but we may also look for the core of individuality which expresses itself in postural and physiognomic demeanors.

Sheldon, however, holds that "postural preferences are unquestionably innate." He speaks in terms of three temperament types which are associated with three body types as follows: (1) *viscerotonic*: round, soft body, short neck, small hands and feet; (2) *somatotonic*: square, firm body with rugged muscles; (3) *cerebrotonic*: spindly body, delicate in construction. The extreme viscerotonic has a good digestive tract. He is good natured, relaxed, sociable, communicative. The pronounced somatotonic is active, energetic, assertive, noisy and aggressive. The fragile cerebrotonic is restrained, inhibited, tense; he may prefer solitude to noise and company. ". . . . and," continues Sheldon, "it is probably as natural and desirable for a cerebrotonic to sit round shouldered on the middle of his back as for a somatotonic to sit square shouldered on the end of his back." Mary Lyon, founder of Holyoke, was a dynamic individual. With characteristic zeal she used to exhort the girls in her Female Seminary with the injunction: "Sit with energy!"

This suggestion is not meant to be taken too literally; but it is a healthy reminder that deep seated constitutional differences are at the basis of the demeanors, the manners and the conduct of children. These differences are infinitely more complex than a threefold classification of types can identify; but the mere acknowledgment of the differences is bound to temper our attitudes toward children. We shall try to understand their postural behavior instead of pressing it into a stereotype.

Posture remains a key concept for the adequate interpretation of child development. But the concept must be enlarged to include the fine muscles as well as the gross,—the tiny muscles of the eyes, the slender fascicles of the fingers, as well as the massive muscles of the

trunk. Motor health depends upon a harmonization of the heavy fundamental and of the delicate accessory muscles. To establish that harmony Nature accents now one or the other group, now the flexors, now the extensors; now symmetry, now asymmetry; now the *go* muscles and now the *stop* muscles. School and home may consider the meaning and the trend of these accents. The varying accents come to the surface in all sorts of activity: tossing the ball, batting the ball, moulding clay, painting, scrawling, printing, writing, reading. Even manners and morals have a motor basis. We may well look for a motor ingredient in all the gradients of growth.

GROWTH GRADIENTS

§ 1. BODILY ACTIVITY

- 4 WEEKS—T-n-r (asymmetric posture) predominates.
Momentarily lifts head in prone position.
- 16 WEEKS—Assumes a symmetrical posture.
Sits propped for short period.
- 20 WEEKS—Holds head erect and steady in sitting position.
Extends arms in prone.
- 24 WEEKS—Rolls to prone from supine.
- 28 WEEKS—Bounces actively in supported sitting.
- 32 WEEKS—Pivots in prone position.
- 36 WEEKS—Sits alone, leans forward and re-erects self.
- 40 WEEKS—Pulls self to feet at side rail of crib.
Creeps.
- 48 WEEKS—Pivots in sitting. Cruises at crib rail.
- 52 WEEKS—Walks with one hand held.
- 56 WEEKS—Stands momentarily alone.

MOTOR CHARACTERISTICS

- 15 MONTHS—Walks a few steps and falls by collapse.
Creeps up steps.
- 18 MONTHS—Walks; seldom falls. Runs stiffly.
Walks into rather than kicks a ball.
Likes to move large toys by pulling, pushing, carrying.
Explores rooms and closets in the house.
Seats self by backing into a small chair.
- 2 YEARS—Runs without falling, and squats in play.
Rhythmical responses as bending knees in bouncing, swaying, swinging arms,
nodding head, and tapping feet.
- 2½ YEARS—Walks on tip toe; jumps on two feet.
Runs ahead or lags when walking on street.
Pushes toy with good steering.
Runs, gallops and swings to music.
Can carry breakable object.
- 3 YEARS—Walks erect and is sure and nimble on his feet.
Walks rather than runs. Can stand on one foot momentarily.
Throws a ball without losing his balance.
Gallops, jumps, walks and runs to music.
- 3½ YEARS—Increased tension and may fall or stumble.
- 4 YEARS—Very active, covering more ground. Races up and down stairs. Dashes on
tricycle.
Enjoys activities requiring balance. Can carry cup of liquid without spilling.
Prefers large blocks and makes more complicated structures.
Throws a ball overhand.
In rhythms interprets and demonstrates own response.
- 5 YEARS—There is greater ease and control of general bodily activity, and economy of
movement.
Posture is predominantly symmetrical and closely knit. May walk with feet pronate.
Control over large muscles is still more advanced than control over small ones.
Plays in one location for longer periods, but changes posture from standing, sitting,
squatting.
Likes to climb fences and go from one thing to another. Jumps from table height.
Likes to activate a story. Runs, climbs onto and under chairs and tables.
Throws, including mud and snow and is beginning to use hands more than arms
in catching a small ball but frequently fails to catch.
Alternates feet descending stairs and skips alternately.
Attempts to roller skate, jump rope, and to walk on stilts.
Likes to march to music.

BODILY ACTIVITY

5½ YEARS—There is demand to discard tricycle for bicycle, and many enjoy a few experiences on a bicycle.

6 YEARS—Very active; in almost constant motion.

Activity is sometimes clumsy as he overdoes and falls in a tumble.

Body is in active balance as he swings, plays active games with singing or skips to music.

He is often found wrestling, tumbling, crawling on all fours and pawing at another child, and playing tag.

Large blocks and furniture are pushed and pulled around as he makes houses, climbs on and in them.

Balls are bounced and tossed and sometimes successfully caught.

He tries skates, running broad jump, and stunts on bars.

Some boys spend much time digging.

7 YEARS—Shows more caution in many gross motor activities.

Activity is variable and he is sometimes very active and at other times inactive.

He repeats performances persistently. Has "runs" on certain activities such as roller skating, jump rope, "catch" with a soft ball, or hop scotch.

There is a great desire for a bicycle, which he can ride for some distance although he is only ready to handle it within limits.

Beginning to be interested in learning to bat and to pitch.

Boys especially like to run and shoot paper airplanes through the air.

Likes to gallop and to do a simple running step to music.

Many have a desire for dancing lessons.

8 YEARS—Bodily movement is more rhythmical and graceful.

Now aware of posture in himself and others. Likes to play follow the leader.

Learning to play soccer and baseball with a soft ball and enjoys the shifts of activity within the game.

Girls are learning to run into the moving rope and can run out when beginning to fail but cannot vary step while jumping.

Stance and movement are free while painting.

Very dramatic in activities with characteristic and descriptive gestures.

Many enjoy folk dances but do not like rhythms unless of a spontaneous dramatic nature.

9 YEARS—Works and plays hard. Apt to do one thing until exhausted, such as riding bicycle, running, hiking, sliding or playing ball.

Better control of own speed but shows some timidity of speed of an automobile, of sliding and of fast snow when skiing.

Interest in own strength and in lifting things.

Frequently assumes awkward postures.

Boys like to wrestle and may be interested in boxing lessons.

Great interest in team games and in learning to perform skillfully.

§2. EYES AND HANDS

- 4 WEEKS—Stares vacantly at surroundings. Seeks light of window or a bright moving object. Regards an object brought into his line of vision.
- 8 WEEKS—Follows a moving person and a nearby object with some head rotation past midline.
- 12 WEEKS—Regards face-hand in t-n-r position.
Holds an object in hand with brief regard.
Fixates prolongedly on electric light or on a person.
- 16 WEEKS—Rotates head and inspects surroundings.
Activates arms as regards an object and looks from own hand to object.
Fleetingly perceives an 8 mm. pellet on table.
- 20 WEEKS—Corrals objects on table and grasps one on contact.
Definitely fixates pellet.
In supine, visually pursues a lost toy.
- 24 WEEKS—Approaches and grasps a toy and can resecure a toy dropped within reach.
- 28 WEEKS—Strongly manipulative; banging, shaking and transferring toys. With toy in hand, visually perceives moving free hand.
Extends arms, regards and attempts to secure objects just beyond reach.
Perceptive of new surroundings. Occupied with watching surroundings while in carriage.
- 32 WEEKS—Holds one object, regards and grasps another.
Bites, chews and regards toys.
Closes eyes on approach of an object to face.
- 36 WEEKS—Brings one toy against another.
Feeds himself a cracker.
- 40 WEEKS—Picks up or pokes at tiny bits with newly acquired index-thumb prehension.
Has a crude release.
In carriage, plays with toys as well as watches surroundings.
- 44 WEEKS—Explores parts of a toy. Probes holes and grooves.
Brings an object into container without release.
- 48 WEEKS—Takes toys from table to chair and reaches toys to side rail of crib.
Plays serially with several toys. Easy release.
- 52 WEEKS—Puts toy in and out of container.
In carriage, inspects automobiles, pedestrians and dogs.

15 MONTHS—Casts toys in play.

Releases one cube over another, and dangles a toy by a string.
Attempts to imitate a scribble by rubbing or banging crayon on paper.
Enjoys looking out of window at moving trees and automobiles.
Pats or manipulates a picture book.

18 MONTHS—Attention is brief, but within its span he encompasses adult performances and imitates them.

Builds a tower of three or four blocks.
Turns several pages of a book and looks at pictures, naming or pointing to one.
Looks out of window at people, airplane, or moon.

2 YEARS—Regards and reaches almost simultaneously.

Fits toys together.
Rotates forearm and turns door knob.
Enjoys watching a moving object. Locates picture in picture book.
Makes tiny marks with crayon on paper.
Builds blocks vertically or horizontally in simple line, or tower with a variety of blocks.

2½ YEARS—Over-grasps and over-releases.

Experiments with vertical and horizontal lines, dots and circular movement in painting.
Finger painting, clay and water hold special interest.
Makes simple block structures.
Enjoys watching trains at a distance. Can identify landmarks on a familiar route.

3 YEARS—Can copy a circle.

May "read" from pictures in a book.
Can put on shoes, and unbutton some buttons.
Strokes are varied and rhythmical in painting.
Manipulates clay and makes flat "cakes" and balls; rolls narrow strips.
There is order and balance in block building.
Enjoys watching men at work or steam shovel or cement mixer in operation.

3½ YEARS—May show mild tremor in fine motor coordination.

May use non-dominant hand, or shift handedness.
Some identify *D* for daddy, *M* for mommy, *J* for Johnnie (own name) and *S* for Susan (sister).

4 YEARS—Draws objects with few details. Can copy a square.

In painting, works with precision for some time, but shifts ideas. Makes crude designs and letters.
Enjoys having name printed on his drawings and begins to copy. May sense number of letters in name and may print first two letters, making marks for remainder. Identifies several letters.

MOTOR CHARACTERISTICS

Uses scissors and attempts to cut on a straight line.

Builds extensive complicated structure with blocks, combining many shapes in symmetrical form.

Laces shoes and buttons front buttons.

Fingers piano with both hands.

5 YEARS—Coordination has reached a new maturity. He approaches an object directly, prehends it precisely and releases it with dispatch.

Builds with blocks usually on the floor and builds graduated towers or low rambling structures with roads and small enclosures.

Manipulates sand, making roads and houses. Molds objects with clay.

If cannot do puzzle with precision and dispatch, he will ask for help or abandon it.

Likes to color within lines, to cut and paste simple things but is not adept.

Makes an outline drawing, usually one on a page, and recognizes that it is "funny."

Likes to copy simple forms.

Paints at an easel or on the floor with large brushes and large sheets of paper.

May enjoy making letters in this manner.

Can "sew" wool through a card by turning it over.

Can manipulate those buttons on clothes which he can see, and can lace his shoes.

Places fingers on piano keys and may experiment with chords.

5½ YEARS—Awkward in many manipulations.

Boys especially are interested in tools, in tinker toys and in watching an electric or wind-up train.

Girls like to dress and undress dolls.

Many show an interest in learning to print own first name and in underlining capitals and words in a familiar book.

6 YEARS—In many of his performances he makes a good start, but needs some assistance and direction to complete.

He is now more deliberate and sometimes clumsy.

Handles and attempts to utilize tools and material.

Cuts and pastes paper making books, boxes; and likes to use tape to fix things.

Hammers vigorously but often holds the hammer near the head. Can join boards and make simple structures.

Is beginning to use pencil crayons as well as wax crayons for coloring and drawing.

Can print capital letters which he commonly reverses. Likes to write on the black-board as well as to use crayons and pencils.

Attempts to sew using a large needle and makes large stitches.

7 YEARS—Manipulation of tools is somewhat more tense, but there is more persistence.

Pencils are tightly gripped and often held close to the point. Pressure is variable but is apt to be heavy.

Child can now print several sentences with letters getting smaller toward the end of a line. There are individual differences in size of printing: some print very small and others continue to make large letters.

Boys are especially interested in carpentry, and many can now saw a straight line. Girls prefer to color and to cut out paper dolls. Several show marked interest in the piano. Usually both hands are used with unequal pressure.

8 YEARS—Increase in speed and smoothness of eye-hand performance, and an easy release.

Holds pencil, brush and tools slightly less tensely.

Enjoys having a performance timed but does not compete with time.

Likely to be a gap between what he wants to do with his hands and what he can do.

Writes or prints all letters and numbers accurately, maintaining fairly uniform alignment, slant and spacing. Likes to do neatly but sometimes is in too much of a hurry.

Beginning to get perspective in drawing. Draws action figures in good proportion. Girls can now hem a straight edge in sewing.

9 YEARS—Individual variation in skills.

Can hold and swing a hammer well. Saws easily and accurately and uses knee to hold board. Makes finished products.

Garden tools are used and handled appropriately.

Builds complex structures with erector set.

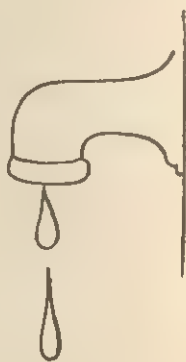
Handwriting is now a tool.

Beginning to sketch in drawing. Drawings are often detailed. Especially likes to draw still life, maps and designs.

Girls can cut out and sew a simple garment and can knit.

Can dress rapidly. Some interest in combing own hair.

Interest in watching games played by others.

PERSONAL HYGIENE

EATING

BY THE time a child reaches the age of five years, one might well suppose that "he should know how to eat!" In a happy-go-lucky household perhaps he does know. But in another household with exacting standards, he falls at least short of expectations! Even when permitted to eat with the family (a mark of promotion), he dawdles, he talks too much, and he may even ask to be fed. He wiggles in his chair, and his napkin must be tucked in at the neck to stay anywhere at all! Well, perhaps he will improve in another year.

But at the age of six he stuffs his mouth; he spills, he masticates grossly, grabs for his food, knocks things over, teeters back in his chair

Besides he is reputed to talk altogether too much, and to kick the table legs. Well, well, perhaps he will improve in another year.

At seven he may talk less at meals; but his mouth is still likely to be full to capacity when he does talk. He may bolt his food,—and also the table; but he is “quieting down.” His napkin is variably below his chin, on the floor, or it lies neglected beside his plate.

At eight and nine he is not impeccable, but the napkin gradient registers an advance. The napkin has moved from its earlier position at the chin to the lap or the vicinity of the lap. The 8-year-old anchors his napkin by sitting on a corner of it.

And so each year brings its achievements and its new promise. Meanwhile year in, year out, parents punctuate the meals with admonitions, reminders, frownings and disciplinary dismissals from the table. An incredible amount of emotional tension disturbs the equanimity of mealtimes of many American homes. All because of an exaggerated emphasis on table manners for their own sake.

In most instances the child is not truly ill-mannered. He is inept, immature. The demands of decorum made upon him are often out of all proportion to his skill. It takes not only motor skill but a certain degree of maturity to coordinate smoothly and with precision the following components of faultless table manners: (a) poised sedentary posture (b) immobilization of napkin (c) cutting, spearing and loading with one or two feeding utensils (d) graceful transit of the load to the mouth (e) timing of the next load (f) agreeable conversation (g) simultaneous timing of conversation in relation to mastication and to the conversation of others (h) swallowing (i) social deference to elders (j) inhibition of kicking table legs (and nearby sibling!) (k) satiety (l) conventional request to be excused.

It is safe to say that the eating behavior of children would tend to improve and not deteriorate if less strenuous stress were placed upon the formal aspect of manners. A friendly atmosphere at mealtimes is of importance, because enjoyment (rather than strict discipline) is still the best aid to appetite.

From a developmental standpoint graceful table manners constitute a minor problem. They depend primarily upon the maturity of the child's motor skills and his tensional controls. Under ordinary conditions the "manners" improve with age (rather than with scoldings). Even at the age of eight, the child eats tolerably well in public; and by ten he usually eats acceptably both at home and abroad. Viewed in this developmental perspective, the sternness and exasperation of the supervising adults seem wasteful and misplaced. (The family life does not need to be ruined after all.) The chief guidance rule is preventive. Make gradual rather than excessive demands; avoid complexities; make concessions; simplify the mealtime situations; rely on favorable atmosphere and attitudes. When parents themselves have highly emotional attitudes with respect to good manners, the problem has shifted from child to adult.

Many feeding problems vanish as soon as parents reduce their own determinations, and place more faith in the lawful fluctuations and the favorable trends of development. The *level of appetite* for example fluctuates from year to year but shows a tendency toward overall improvement. It may be low at 18 months and at four years but there is usually a steady rise from five years on. By nine years nearly all children have a vigorous and generous appetite. Nor is it wise to expect uniform levels of appetite throughout the day. Breakfast is often "the poorest" meal, even though one might wish to insist that it be otherwise. At many ages there is marked variability from meal to meal. But, again, such variability tends to decrease with increasing age.

Closely related is the question of *speed in eating*, which in turn is "manners," because parents become impatient with dawdling and equally impatient with bolting. There are marked individual differences, based on constitutions and on maturity. Speed however, tends to pick up with appetite, and accordingly varies with age. The 5-year-old may eat very slowly. The 8-year-old likes to eat with dispatch and directness, and without deferment of dessert. One must not expect an orderly and uniform progression in eating behavior between the ages

of five and ten. Many of the complications of infant feeding have been transcended, but the organism is still in a state of formative variability. There is a constantly changing ratio between appetite, motor skill, social amenity, and tensional control. This results in unavoidable fluctuations in the general pattern of eating behavior. FIVE reflects the logic of these fluctuations; we should be more tolerant and optimistic with respect to table manners.

A closing word about *preferences and refusals*. They cause no end of worry and vexation. The cultural elevation of spinach, aided and abetted by Pop-Eye, betrays a tendency toward induced feeding, which is not warranted by the science of nutrition. Carefully controlled studies (notably those of Dr. Clara Davis) have demonstrated that a healthy child will voluntarily and unaided select an adequate diet. Under favorable conditions he is likely to select an optimal diet.

This fact should give pause to strenuous efforts to overcome honest aversions to certain kinds of food. To be sure, we cannot always determine whether the refusal is whimsical or due to imitation, custom or to some other environmental factor. But if it is based on bio-chemical incompatibility it should be respected. The phenomenon of allergy has shown that some supposedly wholesome foods are positively harmful to the organism. Even here, developmental factors modify the symptoms. The allergic reaction tends to diminish with age; the organism builds up its immunity and the child tolerates the hitherto inimical substance. Sometimes a parent and child may have very similar allergic symptoms, suggesting the hereditary transmission of bio-chemical constitution.

Preferences and refusals become less marked and less frequent after the age of eight years. In the preceding years there are significant fluctuations. A food preferred at one age is often discarded at a subsequent age. There are temporary periods of strong passions for certain foods. The 5-year-old may manifest a strong dislike for stringy and lumpy foods. This may coincide with a special susceptibility to throat difficulties at this time. The 6-year-old tends to emotional reactions

in relation to the taste of food. He makes rather fine taste discriminations, and he behaves somewhat ritualistically in regard to them. The 8-year-old likewise has emotional reactions to the smell of food. Such reactions, however puzzling and unwarranted they may seem, suggest the presence of physiological factors.

From this brief survey it is clear that eating, in our modern culture is a curious mixture of simple, complex, primitive and cultivated patterns of behavior. The whole child eats. Psychic and somatic factors are intimately blended. And it is difficult to separate environmental from intrinsic origins. Consider the authenticated story of the 2-year-old infant, who survived many weeks at sea in a life boat which escaped a torpedoing. After long experience, he cried for sharks to make their appearance, and he cried when he did not receive his anticipated ration of hard tack!

Differences in cultural experience and differences in race and individual constitution are reflected in the patterns of eating behavior. Sheldon writes almost a paean describing the alimentation of the viscerotonic, who attends and exercises to eat. (While the cerebrotonic eats and exercises to attend; and the somatotonic eats and attends to exercise!) The viscerotonic has a love of food and a warm appreciation of the process of eating for its own sake, which is not to be confused with mere voracity of appetite. "Digestion is excellent and is a primary pleasure."

But all children are not viscerotonics, so we may end on a broader note, based on the famous self-selection study already cited: "The joys of eating bulk large beyond our adult power to remember; they are our best ally in getting children to eat heartily, and it would seem that some latitude should be allowed in the matter of the conventions of eating in the interest of that enjoyment which is after all the best sauce for appetite."

SLEEP

The appended gradients give ample indication that sleep is not a simple function. It is a growing function which undergoes many

changes from year to year. Sleep is not simply a clever trick, which can be learned with practice. It is a complex behavior trait, which was built up through long ages of racial evolution. Every child must rebuild his sleep structures as he matures. The culture helps him as best it can.

The term "sleep structure" is not altogether figurative. To begin with, sleep depends upon certain structural arrangements in the central nervous system. Sleep is not merely a cessation of activity, a turning off of a switch. It is a positive method of inhibitory control, which must be adaptively related to other concurrent functions of the organism, especially those of nutrition, of movement and of mentation (mental activity). And the structure of the sleep mechanisms inevitably changes as all these related functions change. Sleep is not an isolated function which grows by itself.

The newborn baby is sometimes characterized as being an expert sleeper. In a restricted sense this is true. He surely shows marked ability to stay asleep; but should he be considered less competent because as he grows older he becomes more wakeful? Sleep is an intricate behavior complex, which comprises four distinguishable phases: (a) going to sleep (b) staying asleep (c) waking (d) staying awake.

All skills are relative. The newborn infant is most skillful in phase *b*. He shows a simple kind of ability in phase *a*, but often falls asleep in the very midst of nursing, after an intermittent onset. He is likely to cry as he wakens and may continue crying until the next feeding. He has not made a clearcut differentiation between feeding and sleeping.

By the age of 16 weeks the pattern of his sleeping behavior undergoes remarkable changes. He displays increased competence in all four phases of the sleep cycle. He is likely to finish his meal before he sleeps (phase *a*); he stays asleep for a long but not overlong stretch (phase *b*). He may awake without crying from hunger; and he stays awake talking to himself and playing with his hands until the next feeding. He has two or three naps during the day, and a corresponding number of periods of awakeness. This remarkable gain in phases *c* and *d* is based upon structural changes in his nervous system. The brain cells in his "waking center" have reached a new stage of maturity. Consequently

he can be more easily awakened; and he also wakes himself up more often and more easily. He is really a much more highly talented sleeper than he was as a newborn.

If sleep were an independent faculty this would be the end of our story. But as the child's action-system changes his sleep problems change. Awakeness becomes more and more demanding, and it is more difficult to operate those brain cell controls which govern release into sleep. Nature's problem and the culture's problem is to keep phases *a* and *b* in equilibrium with phases *c* and *d*. Now one, now another phase is apparently over accentuated. For example, at 15 and at 21 months the child often wakes up spontaneously during the night, and in an apparently capricious manner remains awake for an hour or two.

During the second and third years release into sleep proves to be a complex process, because it entails a voluntary inhibition of the wakeful cerebral cortex. Going to sleep from choice is a release act comparable to prehensory release. The child first learns to seize an object and then he learns to let it go. At the age of two-and-a-half years he is in a peculiarly unsettled developmental stage. He not only shows difficulty in going into sleep, but he may have difficulty in getting out of sleep! He temporarily loses some of his knack in waking up.

This brief analysis is made to suggest that we need to make a similar analysis when confronted with the sleeping problems between the years from five to ten. It is the whole child who sleeps; but it does not follow that his entire organism slumbers homogeneously with simultaneous equality of depth. He stirs, he dreams, he smiles, laughs, frowns, grimaces, talks in his sleep. He is rarely completely quiescent. Fears disturb his sleep, taking the form of nightmares and night terrors. Whether pleasant and wishful dreams should be considered guardians of sleep must be left in doubt. It is true that at about the age of eight or nine a child may protest on being awakened in the midst of an enjoyable dream; but whether he wishes to go back to sleep to finish the dream or his sleep is not altogether clear.

Many of the management problems of the middle years (from 5 to

10) have to do with bedtime preliminaries. Here, as elsewhere, there are great individual differences, but also there are developmental trends in the demands made by the child upon the parent. The demands are variable from age to age; but they are definite and they usually denote a real need at the time. The nature of the need is not always apparent. One child makes a quick jump into bed so that the man under the bed won't get him. Another child shakes his head to shake out the bad thoughts before going to sleep!

The fall of night, the impending separation from the parent and the prospect of the blackout of sleep itself all combine to soften the texture of daytime morale, and open the way to apprehensions, imaginings and clinging behavior. The 5½-year-old likes to be read to or talked to prior to going to sleep. He seeks reassurance. He even finds comfort in the companionship of a toy animal as bedfellow.

Such props and preliminaries do not necessarily become habitual because with the expansion of personality the pre-sleep demands take on a more constructive character. The bedtime hour may transform into a kind of social hour during which the household is, however, in danger of over stimulating the child. But it may also become a more quiet witching hour, when the rapport between parent and child is sensitized by a heightened feeling of interdependency. The competitive strivings of the day abate. The child becomes more receptive, and emotionally more aware. It is a favorable time for confidences and for organizing mental processes by questions, answers, discussions and hints. Routine prayers have a function; but the more mundane intercommunication also serves a spiritual purpose.

No set rule can be offered. All depends on good timing, which means finding the psychological moment, which in turn depends on recognizing a developmental stage.

Although the 7-year-old may show a certain fondness for his bed, he is quite likely, in another year, to exhibit increased ingenuity and energy in an effort to stave off bedtime. Often this is legitimate because the quantitative need for sleep is decreasing. Given some leeway the

8-year-old helps to settle this problem satisfactorily. He tends to adjust if granted the privilege of some pleasant self-regulated pre-bed occupation. This is a fair tribute to his self-dependence.

But as his self-dependence grows, his self-assertiveness may increase. Unless carefully managed this may precipitate a sharp resistance to going to bed at the expected time. The problems of sleep and personality again reveal their close union. The rebellion is not so much against sleep as against the domination of a parent-imposed task. If the parent meets the challenge wisely he will widen the area of his strategy.

And this principle holds for the management of sleep throughout the whole period of childhood. Sleep difficulties cannot be handled by direct assault. The whole child sleeps,—and wakes. Sleep is a complex of four phases: release into sleep—staying asleep—waking—staying awake! It took ages of evolution to produce these phases. The child needs a befitting allotment of time to organize these phases into his own developing personality.

ELIMINATION

A physiologist would include under the heading of elimination the excretory functions of perspiration, respiration, micturition and evacuation. These functions are seemingly so automatic that one might wonder whether they need to be included in a volume on child behavior. The first two mentioned do indeed take care of themselves to a marked degree; although they always retain a significant relationship with the psychological states of the individual.

The functions of bladder and bowel, however, are not allowed to take care of themselves. They are so heavily complicated by superimposed cultural controls that they undergo a tortuous course of organization and of reorganization throughout the periods of infancy and childhood. The controls are not fully established even during the first five years of life.

These excretory functions are governed by a combination of volun-

tary and involuntary mechanisms. When bladder and bowel are empty or partially filled, the urethral and anal sphincters (ring-like muscles) are kept in tonic contraction by the sympathetic nervous system. This mechanism takes care of itself; it is involuntary. When the contents of bowel and bladder reach a certain level (which varies greatly with conditions and individuals), the sphincters relax; the smooth muscles of the containing walls contract; the contents are expelled. Here again the basic mechanism is involuntary. It is essentially the only mechanism which operates in the early months of infancy.

As the child grows older, a higher mechanism is gradually superimposed upon the lower. Increasingly complex connections are made with nerve fibers which go to and from the brain. Voluntary control becomes possible only as these nerve connections take shape. Sphincter control, as we sometimes call it, therefore depends not upon "will power" but upon nerve cell structures which have to grow. All toilet training must defer to the maturity of the child's central nervous system.

This principle holds even during the middle years. The lapses which come at the age of six, for example, are readily explained in terms of current developmental changes which affect the entire organism and therefore involve the sphincters.

Parents do not have to be neurologists in order to appreciate the difficulties which confront the child in the acquisition of sphincter control; but a brief tabulation of the progressive steps toward mature control will throw light on problems of guidance and prevention:

a) In the newborn infant the excretory acts are numerous and apparently irregular.

b) They decrease in number and tend to occur during periods when the child is awake.

c) Being awake he attends to the accompanying internal sensations.

d) He associates the act with a particular place and with customary events in his daily routines.

e) He "learns" to delay, as inhibitory neural mechanisms mature. He

delays by inhibiting the otherwise spontaneous relaxation of the sphincters.

f) Lengthens the period of his delay.

g) Learns to terminate the inhibition at will. This is true voluntary release; but the occasions when he can exert that will are few and limited in scope.

h) Uses gestures, vocal signs, general names, and later distinguishing names for the products of bladder and bowel, *after* excretion.

i) Uses such words *during* excretion.

j) Uses the words *prior to* excretion, "tells," at first not soon enough; but eventually he tells in good time.

k) Dry all night.

l) Wakes by himself and asks to be taken to the toilet.

m) Develops a curiosity about the excretory functions of others. He takes a special interest in strange bathrooms. He experiences a sense of privacy and of modesty.

n) Lengthens the span of retention and facilitates voluntary release.

o) Foresees urgencies long in advance and plans accordingly.

p) Adjusts and controls despite changes of scene and the hurly burly of school life.

q) "Accidents" decline almost to the vanishing point.

It requires nearly all of the letters of the alphabet to list the progressive stages of organization in bladder and bowel control for the first ten years of life. Even so, our listing greatly oversimplifies the underlying developmental processes. Progress does not proceed in a straight and steady line. There are many fluctuations and apparent lapses, due chiefly to the ever changing accents and patterns of growth. Sphincter control does not develop independently, but must always be incorporated into the total action-system. For example, the infant often "forgets" his toilet training when he learns to walk. The drive to walk is so strong that it temporarily interferes with apparently established skills. The excretory act must be re-adapted to postural and other changes.

Moreover, reciprocal interweaving of opposite skills (e.g. inhibition

versus release) is going on all the time. At times inhibition takes the upper hand: the child withholds valiantly for a long period but is unable to release at will. Later the release mechanism dominates: inhibition is overpowered and release becomes expulsive. These are normal growth fluctuations. They are not due to perversities. They are expressions of physiological awkwardness.

Similar awkwardnesses beset the child even after he is old enough to go to school. In spite of a sharp strengthening of cultural inhibitions the organism seems to lose some of its previous inhibitory capacity. Accidents of bowel as well as bladder increase during the sixth year. They are comparable physiologically to the accidents already mentioned, which occur in the infant with the emergence of the powerful walking drive. Once more, at the age of six, the organism is undergoing profound transformation. Sphincter controls are affected.

Needless to add, individual differences in this field of personal-social behavior should be recognized both at home and at school. The tonus of the sphincters is highly susceptible to reflex stimulations. Psychic activity tends to increase their tone; but in temperamentally susceptible individuals the bowel and bladder organ systems react as tensional outlets. We must, therefore, think in terms of physiological status and maturity, as well as in terms of cultural propriety.

Parents are unduly mortified by lapses in children of school age. The lapses are most likely to occur following an afternoon session at school. It is not so much the child as the adult who fails to foresee these mid-afternoon urgencies. Similar urgencies and instabilities re-appear among 8-year-olds. Many teachers aggravate these difficulties by unnecessarily rigid restrictions. The toilet arrangements, mores and practices which prevail in many elementary schools need liberalizing revision.

BATH AND DRESSING

Birds and four-footed animals frequently exhibit forms of behavior which are ascribed to instincts of cleanliness and adornment. The human species may be credited with comparable instinctive tendencies;

but under the conditions of modern culture these tendencies in the young do not always come to spontaneous and clear cut expression! Sometimes the infant displays a positive aversion to clothes; and although he may enjoy the aquatic aspects of bathing he may soon resist the sanitary. At any rate the tugging, the pulling, the dawdling, the bribing, the exhorting and the scolding which, at varying ages are occasioned by the demands of bath and dressing, are sufficiently impressive to warrant a brief examination of underlying causes.

The causes are primarily developmental, and they are exacerbated whenever parents and caretakers become too exacting. The child's failure to meet expectations must always be considered in relation to his sense of time and timing, and the maturity of his attention patterns. The ultimate goal is self-dependence, but it must be reached by gradual stages.

For a baby the bath has many facets of interest,—social, dermal, athletic and playful. He delights in the water play and in gross motor activity. At the age of one he plays exploitively with washcloth, soap and floating toys. Needless to say he has no appreciation of the more practical purposes of the bath. At 18 months he may show resistance to the bath for brief periods, because of the strength of new gross motor drives. At two years he takes a positive interest in helping to wash himself; he especially likes to wash his hands at a bowl,—but not from motives of cleanliness. At two-and-a-half years he is likely to be in a ritualistic phase of development. He does not entertain an image of the objective of the bath. He imposes more or less elaborate and irrelevant rituals upon the whole situation. If his caretaker thinks solely of the relevant objectives and not of the ritualisms, child troubles ensue. By three the rituals abate. By four and five the bath is an easy routine; and often so pleasant that it is difficult to terminate. By eight years some children can take over completely.

The 5-year-old washes his hands before meals, if reminded. Reminders are necessary for the next two or three years. The 8-year-old, however, prefers a very mild reminder in the form of a faint and tactful

hint. Cleanliness is not yet next to godliness; but it is approaching the zone of personal sensitiveness.

Children between the ages of five to nine still need some assistance in the niceties of cleanliness, neatness and manicuring. There are individual differences in the degree of docility shown. Some children react with extreme resistance to help about the ears, and even to combing and brushing of hair. In some instances this extraordinary resistance is based, not on personality negativism, but on a temporary hyperesthesia, which probably has a developmental basis, and is exacerbated in certain individuals.

The development of self-dependence in dressing is roughly parallel to that of self-dependence in cleanliness. It depends first of all on motor abilities, and secondly, on consciousness of social approval. Interest in adornment and display serve to motivate the child at certain ages, even though earlier he may have shown a predilection for no clothes at all. Individual and sex differences become apparent in the pre-school period, and pronounced during the elementary school period. Adolescence brings a host of elaborating manifestations.

The 5-year-old usually can dress himself almost completely; but he is somewhat careless or indifferent about attire. His mother daily selects the clothes to be worn and lays them out in advance. The 6- and 7-year-olds need similar assistance. The 6-year-old, characteristically enough, presents special problems, due to the transitional phases of his current development. He is more clothes conscious than at five, but he does not readily accept the help he needs. By nature he dawdles. He is very easily distracted from the task of dressing. He needs management (and forbearance) more than direct pressure. Time brings changes. SEVEN likewise dawdles; but is more likely to end with an effective spurt. EIGHT is more efficient in dressing,—even though boys may affect disdain of neat and tidy clothes once they have them on. From eight to ten there is a marked increase of responsibility in selection of clothes, disposal of soiled clothes and adaptation of garments to weather and occasion.

Although culture plays a powerful role in the shaping of customs

and costumes, the spontaneous child is likely to disclose certain trends of natural man. Even in the removal of clothes we glimpse, at least darkly, a developmental gradient! FIVE-AND-ONE-HALF casts his garments all over the room. SIX drops them on the spot or flings them aside. SEVEN drops them more decorously. EIGHT puts them on a chair (where they may accumulate from day to day in some households. NINE may even hang them up neatly.

And for the record it should be added that the boy who *never* would comb his hair is reputed to give it altogether too much attention, now that he is in his teens.

SOMATIC CONDITIONS

Under this heading we shall sketchily consider some of the somatic, that is, bodily conditions, which are intimately related to the development of the child's behavior characteristics. The subject is much too vast and complicated for summary treatment. We simply wish to suggest, somewhat concretely, how the maturity of the child reacts upon his physical and mental well being.

From an anatomical and physiological standpoint the child's organism consists of a collection of organ systems—skeletal, muscular, gastrointestinal, urogenital, pulmonary, circulatory, etc. The various organs are, of course, closely interrelated; indeed they are knit into a single living unit through the nervous system and the humoral system,—that is, by the blood and body fluids. When all these organ systems function in ideal harmony, the child is ideally healthy. When the harmony is disturbed by disease, injury or excessive strain the child reacts with illness, with somatic "complaints," with tensional symptoms of varying severity. Sometimes the symptoms are signals of danger; very often they are methods by which Nature attempts to compensate or to restore an optimal working balance. Sometimes also the symptoms are passing, normal indicators of growth changes. These latter symptoms are very interesting. We wish that we knew more about them.

It is certain that the child's body chemistry undergoes alterations

with age. This is demonstrated by shifting allergies, by fluctuating appetites and food preferences, by changing susceptibilities and immunities to disease. There are certain diseases seen in infancy and childhood which are seldom or never seen after adolescence. The severity of a given disease also varies with age. Contagious diseases are, in general, more dangerous before rather than after five years of age. This is partly due to differences in the "immunologic maturity" of the tissues. Fatigue, psychologic stress and shock, malnutrition and other factors may precipitate illness, but the primary susceptibilities of the organism are determined by bio-chemical defenses, which are closely correlated with age and constitutional type.

With modern medical techniques the incidence of infectious diseases is reduced by protective inoculations. Nevertheless, conservative opinion holds "that hereditary factors, influenced by the age of the host, may be of importance in determining whether an individual is capable of forming antibodies when stimulated by infectious agents." The marked individual and age differences in allergy reactions lend support to this point of view. Some writers use the term "serological maturation" in much the same way that we speak of behavior maturation.

Although the organism may be described as an interdependent collection of organ-systems, this does not mean that the several systems mature at a uniform rate. On the contrary each system has a more or less unique and independent curve of growth. Now one system or function is in the ascendancy, and now another. It is these very deviations from lockstep which produce both commonly observed, and also commonly unrecognized irregularities of child development.

Four-year-old children often prove to be peculiarly susceptible to colds. A child may have one cold after another throughout the winter. At five he may show excellent health, escaping, perhaps, with one cold. In the period approximately from five-and-a-half to six-and-a-half years there is marked increase of susceptibility to infectious diseases, and the child is sicker with illness when it strikes. The mucous membranes of throat, bronchi and ears appear to be peculiarly vulnerable at this age.

This is not surprising, because much other evidence corroborates that the 6-year-old is in an active stage of developmental transition. At seven and eight years illnesses are fewer. The total death rate is lower in the age period from five to ten years than in the years under five, and it is lowest of all in the half decade from ten through fifteen years.

The statistics for injuries and fatalities from *accidents* also show significant age trends. These trends again are based on maturity factors. Parents and educators should realize that the incidence of accidents is determined by three sets of interacting factors: 1. the child's physique 2. his behavior traits 3. exposure to risk. Even the preferred site of injury may be affected by the child's body build and motor characteristics (factors 1 and 2). For example, the 2-year-old still leans forward when he runs. Should he fall he is likely to bruise his forehead. As he grows older his running stance becomes more erect; at two-and-a-half years he is more likely to hit his nose; at three or four years his teeth; at four-and-a-half years his collar bone. A 6-year-old may break his fall with his arm (and his arm with his fall); the 8-year-old is more likely to jeopardize his legs.

A recent government report of the Children's Bureau has shown that accidents represent the leading cause of death among school children, and therefore constitute a public health problem of the first rank. The second leading cause of death (pneumonia and influenza) for children from five up to ten years of age shows a rate of 10.2 (boys) and 9.0 (girls), as compared with accident rates of 39.3 (boys) and 20.0 (girls). This sex difference is even more marked for the two principal accidents, namely, motor-vehicle fatalities and drowning. Boys are more daring and reckless. Girls are more cautious, and age for age, are physically and psychologically more mature. Girls, accordingly, incur fewer risks, with one outstanding exception: the rate of fatalities for accidental burns is more than twice that of boys for the five to ten years age group.

These trends must not be taken too literally because many accidents unfortunately contain unpredictable elements of physical place and

circumstance. The most predictable areas lie in the field of behavior. Among pre-school children the amount of exposure to risk (factor 3) is largely determined by their immature behavior traits and lack of parental foresight. It is not surprising that fatalities and injuries from burns, scalding, poisons, knives etc. are excessive for the household age from infancy to five years. Automobile, bicycle and street accidents, on the other hand, play a leading role in the period from five to ten years. Six and Eight are notoriously "careless" ages, not because the children are willfully heedless, but because they lack the capacity to take adaptive heed. In fact a 6-year-old may take very conscious heed before he runs across the street to meet his mother who is waiting for him. He may close his eyes, clench his fists and dash; but he may fail to make adequate allowance for an oncoming car. Perhaps the parent did not make adequate allowance for the limitations of the child's psychology. Here are two sets of behavior factors which can be recognized and brought under preventive control. A similar control should be extended to the 8-year-old. He is in an expansive hurry-up, dash-away age. He does not look far enough ahead. Frequently he is given altogether too much freedom in the use of his bicycle. He needs more delimitations and supervision to reduce exposure to risk.

This entails planning and management. Parents and teachers are inclined to place too much reliance on admonition and explanation. Children need help in acquiring attitudes of caution; but mere words, even emphatic words, do not suffice. Sometimes the repetitive, worrisome, scolding insistence on caution is only a form of relief for the mother, expressing her subchronic state of anxiety. Often there is excessive appeal to fear. Caution has elements of fortitude as well as fear. If the child is unduly afraid he cannot be duly cautious, that is, duly prudent and wary. The parent-child relation should not be fear-some in either direction; there should be mutual confidence, so that children will freely and promptly report home even apparently minor accidents or injuries regardless of the "guilty" circumstances under which they may have occurred.

The organism of the child rarely remains for a prolonged period in smooth equilibrium. Even in the absence of accidents and frank disease the child is subject to tensions which express themselves outwardly in different forms of *tensional activity*. These tensional manifestations are varied in kind and degree. Some are transient and benign; they may even be part of the mechanisms of adjustment. They take on an abnormal character when they become stereotyped and over compulsive. It is difficult in many instances to determine the origin and basis of any given tensional activity. There are enormous individual differences based on temperamental characteristics, as already suggested by the so-called qualities of viscerotonia, somatotonia and cerebrotonia. Well organized children who show a favorable balance of these qualities show the least pronounced tensional symptoms. Conversely, poorly organized children show marked, frequent and even multiple symptoms. On the other hand an over rigid and generally tense child may enjoy very few specific tensional outlets. He may show a more general collapse under stress. All of which suggests that such outlets may serve a function in normal as well as abnormal behavior.

The classic tensional activity of the pre-school period is thumb-sucking. In so far as it is definitely related to the functions of eating and sleep, it may be attributed to somatic conditions. But this easy generalization does not do justice to the changes and elaborations which occur in connection with teething, excitement, ennui, fatigue, variations of appetite, association with rituals and accessory objects and with other modes of tensional release. We have shown that this behavior, in ordinary instances, follows a developmental sequence toward resolution. This lawful sequence has an encouraging import, although it does not preclude that other forms of tensional behavior will not assume a similar role in the school years.

Temper tantrums which might also be listed among pre-school tensional outlets show a comparable developmental course. They vary in nature and severity with age and temperamental type. They are extremely prevalent up to the age of two-and-a-half years. Their later

manifestations may be considered in the following chapter, which deals with the expressional aspects of emotional behavior, including crying, anger and aggression.

Rocking, head banging, head rolling, various forms of rhythmic and pre-masturbatory movements, stuttering, finger nail biting and psychics like repetitive eye blinking may occur before the age of five, with resolution during the middle years after five.

Tensional behavior is at a relatively low ebb at five years, and is ordinarily limited in scope; but it shows a marked increase in the period from five-and-a-half to seven years. School entrance is frequently accompanied by temporary speech tensions, nail biting, an exacerbation of thumb-sucking, hand to mouth gestures, chewing of pencil, chewing of hair, tongue protrusion, pulling of mouth corner, pursing of both lips and biting the lower one! This cataloguing of the various patterns exaggerates the gravity of the reactions, and yet conveys a healthy reminder of the tensions under which the school-beginner is laboring. Many of these tensions escape by the mouth outlet in the form of clicking, blowing through the lips, heavy breathing, gasping with excitement, and throat clearing and insufflations. But the tensions also involve the eyes which dart with horizontal thrusts, and the legs which shift and jiggle, the knees which knock, and the feet which tap restlessly. For no apparent reason a child may make somewhat peculiar throat noises and may even repeat them so often as to suggest a convulsive tic. But usually such a "nervous habit" proves to be a temporary manifestation, on a par with his general restlessness and the clumsiness which, so it is said, causes him to trip over a piece of string.

The tensional behavior of the 7-year-old is less pronounced throughout. If thumb-sucking, nail biting or stuttering persist from earlier years, he now makes a voluntary effort to bring them under control. The outlet activities of hand to mouth are less emphatic, but lip pursing, whistling and throat noises may become very persistent. Fingers and hands are perhaps more restlessly active than feet. Some SEVENS show a marked sensitivity and tensional overflow into the hand. They

may not like to be touched, but they themselves like to touch objects in an exploratory manner. A characteristic tensional expression of the 7-year-old at school is a mildly pensive sigh, head resting in hand, elbow propped on desk, eyes averted obliquely.

The 8-year-old, true to his expansive, highly-gearred nature, displays a larger variety of tensional outlets. Many earlier patterns reappear, but with a fluidity of shift which makes them less noticeable. His tensional behavior is more diffuse, and much of it is channelized in chatter, gestures and mimetic expressions. There is grimacing, scowling, raising of eyebrows, humming and smacking of lips. The eyes not only dart, but also roll. No somatic member seems to be free from tensions. He plays with a gadget, he jiggles his legs, he shoves his body; he may feel an urgency to urinate when confronted with an unpleasant task. It is as though every one of his organ systems were permeable to the inner tensions which ordinarily are a relatively normal feature of his behavior day. The diffuseness and diversity of his reactions are in character with his somatic make-up, his physiologic maturity.

At nine and ten there is a quieting down of tensional manifestations. They are less diffuse and ubiquitous; they are more closely associated with specific situations, and they tend to reflect the idiosyncracies of the individual. Several reactions are rather characteristic of this age period: pianoing of the fingers, fiddling at a button, blowing of lips and cheeks, picking at fingernails and cuticles, tiny gestures of plucking at eyelid, and a sweeping gesture of clapping the hand on the head in pseudo-dismay. Equally characteristic are the emotional refinements of worry and anxiety; for the fields of tensional behavior and of expressional behavior inevitably overlap. The 9- or 10-year-old can grimace with mock deprecation of his failures; he can smile and laugh at situations and at himself.

Thereby he registers his increased maturity. This type of smiling and laughing is an excellent form of somatic tensional outlet! It denotes a more cultivated mind; it is also reminder that some of the cruder physiological tensions of earlier ages, if not excessive, have a certain sanction in the economy of child development.

GROWTH GRADIENTS

§ 1. EATING

- 1 YEAR***—*Appetite* Usually good for all meals though may be less for breakfast.
Refusals and Preferences May refuse milk from a bottle, especially if some change as a shift in style of nipple has been made. May also refuse milk from a cup. Preferred bottle is the 6 P.M. bottle. Preferences for certain foods are becoming well defined: certain kinds of cereal, certain vegetables.
Self-Help May finger feed for part of one meal. A few boys refuse any help. Many insist on standing while eating. May need a toy—or preferably two toys—to occupy his hands while he is fed.
- 18 MONTHS**—*Appetite* May be decreasing and is usually less than the robust infant appetite. Appetite for milk from the bottle may be better than for milk from the cup. Noon meal usually the best.
Refusals and Preferences Fluctuating and not clearly defined.
Self-Help Most children enjoy feeding themselves and may do so for all three meals, though mother may need to fill the spoon. Child hands empty dishes to mother as he finishes with them.
- 2 YEARS**—*Appetite* Fair to moderately good. Noon meal usually the best.
Refusals and Preferences At this age many children are “finicky” or “fussy.” Child can name foods and can verbally express likes and dislikes. He prefers whole separate foods; does not like puréed foods, or several foods mixed together. Preferences may be related to taste, form, consistency or color. Goes on food jags. May prefer red or yellow foods.
Self-Help Some can feed themselves and will accept no help. May not even want mother nearby as they eat. Others need help. Two extreme groups now discernible: the “messy” and the “spotless” eaters.
- 2½ YEARS**—*Appetite* Often fluctuates between very good and very poor. Usually one good meal, noon or evening. May eat better in-between meals than at meals.
Refusals and Preferences Even more definite than at two. Meat, fruit and butter are usually favored; green vegetables refused. Preferred foods, child will feed himself; other foods, he will eat if fed; some he absolutely refuses. Food jags continue, first one food, then another being favored.
Self-Help May feed self entire meal, or may want to eat part and then call parent for help with the remainder. Marked ritualism: child demands the repetition of foods, of dishes and of arrangement of dishes.

* For further details on all gradients—ages one to four years—see *Infant and Child in The Culture of Today*.

PERSONAL HYGIENE

- 3 YEARS—Appetite** Fairly good—less variable than formerly. Breakfast and supper may be the best meals. Milk intake increasing.
- Refusals and Preferences* Less marked than earlier. Meat, fruit, milk, desserts and sweets are favored. Vegetables are now accepted. Child likes foods which require chewing. May ask for special foods he likes as meal is being prepared.
- Self-Help* Can feed himself and can eat well by himself. May be too demanding, both of food and of attention, if allowed at the family table, or may dawdle.
- 4 YEARS—Appetite** Appetite is fair. Child drinks his milk rapidly and well.
- Refusals and Preferences* Food jags or food strikes indicate marked and definite preferences for certain foods and dislike of others.
- Self-Help* Child is beginning to help plan his meals. Helps set the table. May dawdle if eats alone though does not need to be fed.
- Table Manners* May be able to eat several meals a week with family—often breakfast, or Sunday dinner. However, talking usually interferes with eating and child usually has to interrupt his meal to go to the bathroom. Much leaving table.
- 5 YEARS—Appetite** Usually good though varies markedly from meal to meal with breakfast often the poorest. Child cleans his plate.
- Refusals and Preferences* Refusals definite: cooked root vegetables, gravies, casseroles and puddings.
- Prefers meat, potatoes, raw vegetables, milk and fruit.
- Self-Help* Feeds himself slowly but persistently and with a fair amount of ability. May need help toward end of meal or with certain foods. Beginning to use a knife for spreading.
- Table Manners* May eat most meals with family, but may have supper early in the kitchen. Talking interferes with eating. Napkin tucked in at neck.
- 6 YEARS—Appetite** Usually large (child said to be a “wonderful” eater); but may eat more between meals than at meals. Likes a snack before bed. Takes more than he can handle. Wants the biggest piece. Breakfast often continues to be the poorest meal.
- Refusals and Preferences* Refuses foods by spells; dislikes certain foods because of texture. Likes and is willing to try new foods. Dislikes cooked desserts and cooked vegetables. Prefers meat, potatoes, milk, raw vegetables, peanut butter, ice cream and candy.
- Self-Help* Many prefer to finger feed, though some will not touch food with their fingers. May prefer a fork to a spoon. May be awkward in spreading.
- Table Manners* Manners are poor. Child talks too much, spills, stuffs mouth, chews with mouth open. He grabs for food, knocks things over, wriggles in chair, or teeters back in chair. Kicks table legs. Criticizes behavior of siblings and adults. Dawdles. May refuse napkin or bib, or may have it tucked in at neck.
- 7 YEARS—Appetite** Moderate. Extremes of poor and excessive appetite in different children.

EATING

Refusals and Preferences Beginning to accept disliked foods, though dislikes strongly flavored cooked vegetables or cheeses. Likes milk, meat, ice cream and sandwiches, especially peanut butter.

Self-Help Very little difficulty with implements. Pushes food onto fork or spoon with free fingers.

Table Manners Improving, though may spill, bolt food, stuff mouth, talk with mouth full. May want to bring his last activity to the table with him. Leaves the table with any distraction. At times he may be interested in the table conversation. May quarrel or fool with siblings. Sometimes prefers to eat by himself so he can continue listening to radio or reading. Prefers napkin beside the plate and uses when needed.

8 YEARS—*Appetite* Excellent. Poor eaters for the first time have a good appetite. Increase in intake as well as increase in weight. Some may need to have intake restricted.

Refusals and Preferences Fewer refusals. Preferences about as at seven years. Will attack new foods. Judges food by the odor. Expresses "love" for certain foods.

Self-Help Less frequently needs to use fingers. Beginning to cut meat with a knife, but is not skillful. Can "fix" own baked potato.

Table Manners Variable. Definite contrast between poor table manners at home and good table manners abroad. At home he bolts his food, spills food, pushes it around on his plate, takes large mouthfuls and talks with his mouth full. Plays with silver. Aware of good table manners but unable to put them into practice. Wants to have his turn to talk and tends to interrupt adult conversation. May anchor napkin by sitting on it.

9 YEARS—*Appetite* Under better control. Now eats approximately an adult meal and even poorer eaters settle into more balanced intake according to their needs.

Refusals and Preferences Frankly refuses certain foods. May refuse a food cooked in a different way from what he is used to. Usually prefers and looks forward to a sweet dessert.

Self-Help Good control of implements. Tends to saw meat with a knife and cut too large pieces, therefore may need help.

Table Manners Generally improved but may still be better away from home than at home. May become too absorbed in listening or in talking.

§ 2. SLEEPING

1 YEAR—*Nap* Usually one a day, from 11 or 11:30 to 12:30 or 2:00.

Night Baby falls asleep between 6 and 8 P.M. Sleeps well through the night, till 6 to 8 A.M. Then cries or vocalizes for mother. After toileting may remain happily in bed for another hour before breakfast.

18 MONTHS—*Nap* Follows the noon meal. Child may take toys to bed with him, but usually goes right to sleep. Nap lasts 1½ to 2 hours, child waking happy and wanting to get right up.

PERSONAL HYGIENE

Night Bedtime comes between 6 and 8 P.M. Child may play with teddy bear or other toy briefly before dropping off to sleep. Frequent night waking, especially after an exciting day. Child is easily quieted. Wakes in morning between 6 and 8 A.M., lies quietly till he feels that it is time to get up, then calls parent.

2 YEARS—Nap In afternoon. Child may sleep for two or three hours. Some may not sleep for periods of several weeks, or for several days a week, but at these times will usually play in their room for an hour or so. A long nap tends to displace night sleep.

Night Does not fall asleep till late, often 8 or 9 P.M. Many bedtime demands. May want to take several toys and books to bed with him, and may call parent back several times to ask for toileting or for a drink. May cling to mother at bedtime. Difficult for him to get to sleep. Long play period may precede sleep. May wake several times during the night and demand toileting. Usually wakes at the slightest sound.

Wakes between 6:30 and 7:30 A.M.; plays happily alone. If he calls, is easily satisfied till breakfast time with being changed and given a cracker and a few toys.

2½ YEARS—Nap Child willing to go to bed for nap but may not stay in bed long. After a short play period may be ready for sleep, especially if some novelty, as a blanket-bed on the floor is introduced. Once asleep may sleep too long and may need to be awakened lest nap interfere with night sleep. Slow to wake up, feels miserable and often cries.

Night Bedtime should not be delayed past 8 P.M., although hour of going to sleep may vary from 6 to 10 P.M. depending some on length of nap. Bedtime is complicated by elaborate rituals. Some call mother back after she has left. Child sings and talks to himself before falling asleep. Takes toys to bed. Considerable night waking with crying or demand for toilet or drink.

Most sleep the clock around and may not awaken till 8:30 or 9 A.M. If awake earlier, may play till time to get up.

3 YEARS—Nap The beginning of "play naps," though some may actually sleep for one or two hours.

Night Fewer bedtime rituals than at two-and-a-half. Doll or teddy to bed. Much waking during the night. Child may lie and talk to himself; may get into mother's bed; may wander about the house.

Morning waking, between 6 and 7 A.M. Child may be whining and fretful. He may call to be picked up.

4 YEARS—Nap Usually enjoys a "play nap" alone in his room, with books or toys, from 1 to 3 P.M.

Night May go to bed willingly at 7 P.M.; enjoys hearing a bedtime story. May then enjoy half an hour alone in bed with books or crayoning. Takes dolls or teddy to bed.

Wakens in night only for toileting; usually needs only a little help from adult.

SLEEPING

Morning waking between 7 and 7:30 A.M. Gets up and plays in own room till time to go to parents' room.

5 YEARS—Nap Many nap once or twice a week for an hour or more. A few, especially boys, may nap several days a week.

Bedtime Variable from 7 to 8 P.M. dependent on nap and activity of the day. Now may go to bed without pre-sleep activity though some "read" or crayon for a while. Less taking of toys to bed.

Night Some sleep through but many waken for toileting usually after midnight and may have difficulty returning to sleep. May have frightening dreams and wake screaming.

Morning Most waken at 7-8 A.M. and can busy themselves with play materials until time to get up.

6 YEARS—Nap A few have half hour nap on occasion at five-and-a-half years. At six years an hour's "play nap" may be desirable.

Bedtime At five-and-a-half rarely resists bedtime hour which is usually between 7 and 8 P.M. May prefer supper in bed followed by play. May want mother to talk or read to him.

Return to taking toy to bed. May enjoy prayers.

At six years most usual bedtime is at 7, though some wait till 7:30 or 8:00. Enjoys some activity with adult. May tell day's experiences.

Night More can sleep through night. Child disturbed by bad dreams and gets into mother's bed, or mother goes to him. Several still waken for toileting and usually manage by themselves.

Morning At five-and-a-half, two extreme groups: one wakens very early (5-6 A.M.), the other has to be awakened (8 A.M.). By 6 years, usual time is 7 to 7:30 A.M. Gets right up and can then dress self if clothes are laid out, but apt to dawdle.

7 YEARS—Bedtime From 7-8 P.M. Gets ready for bed by himself with little adult help. May like to be read to. Two extreme groups: one group falls asleep rapidly; the other sings, listens to noises in house or sees shadow objects in room prior to sleep. A few take toys to bed.

Night Usually sleeps soundly with less waking with nightmares or for toileting.

Morning Wakens by himself at 7 A.M. as a rule, but may sleep later on Sunday mornings. Some like to waken early on occasion to read or do some special thing. Needs some reminding to get dressed.

8 YEARS—Bedtime Later, usually 8-8:30, occasionally 9 P.M. Getting to bed now more difficult. Wants to put off, stay up later, read one more chapter, etc. Can get ready unaided but needs motivation. Mother tucks him in. May need quieting down time of reading or music before ready to fall asleep.

Night Usually undisturbed.

Morning Awakens 7-7:30 A.M. and dresses self.

- 9 YEARS—*Bedtime* Knows bed hour which is usually 8 P.M. or later: but may need to be reminded. Gets ready by himself. Reads or listens to radio until 9 P.M. May continue this too long and need reminding. A few need to be asleep by 7:30 P.M.
- Night* Usually quiet, though some waken screaming from nightmares.

§3. ELIMINATION

- 4 WEEKS—*Bowel* Earlier, bowel movements were numerous, occurring somewhat sporadically.
- Now more closely associated with act of waking. Occur in daytime, three to four a day.
- Bladder* Infant may cry during sleep on occurrence of micturition. There may be a glimmer of wakefulness.
- 8 WEEKS—*Bowel* Two movements a day, at waking or in close association with a feeding.
- 16 WEEKS—*Bowel* Delay between feeding and evacuation. This may allow temporary "success" if mother places child on a receptacle at this time.
- Bladder* Number of daily micturitions has decreased and volume of any one has increased.
- 28 WEEKS—*Bowel* Temporary irregularity. No longer closely associated with waking or eating. One may occur early in morning in play period; another in afternoon.
- Bladder* Soaking wet diapers. Intervals of dryness from one to two hours in length.
- 40 WEEKS—*Bowel* May respond to training for a period of several weeks; may grunt and look at mother's face during the act.
- Bladder* May be dry for a whole hour after a nap or after a carriage ride. Mother may have temporary "success" placing child on pot.
- 1 YEAR—*Bowel* Postural developments introduce complications. Functions best standing or lying down. "Successes" less frequent; resistance again appears; relation of looking at mother disappears.
- Bladder* Dryness after nap. Intolerance of wetness at certain times of day.
- 15 MONTHS—*Bowel* Resistances and irregularities lessen. But infant may show sphincter contraction when on toilet, releasing only after diaper is put on.
- Bladder* Postural difficulties (insistence on standing) have lessened. Likes to sit on toilet, and responds at optimal times. At other times may resist. Retention span has lengthened to two or three hours. Placement on toilet may stimulate child to withhold urine. May release urine as soon as removed from toilet. May be exaggerated release. Points with pride to puddles; may pat puddles.
- 18 MONTHS—*Bowel* Contraction may be very strong; release explosive. Articulate children may say "Toidy," increasing voluntary control. Such children may have few accidents from this time on.

ELIMINATION

Bladder Can respond with nod of head or "No" if asked if he wants toilet. May even ask, saying "uh," etc. May feel shame at puddles and may report accidents by pulling at pants.

21 MONTHS—*Bowel* May have temporary diarrhea.

Bladder Child reports accidents by pointing at puddles. Tells after wetting and sometimes before. Pleased with successes. But number of urinations increases and lapses may multiply.

2 YEARS—*Bowel* Trainable. Parent may remove child's pants and leave him to his own devices near the toilet facilities. Some children do best if divested of all clothes.

Bladder Better control. No resistance to routines. Tells in advance. May go into bathroom and pull own pants down. May express verbal pride in achievement: "Good boy." May call puddle, "Bad boy."

2½ YEARS—*Bowel* Extremes and exaggeration. May skip a day between movements.

Bladder Retention span lengthening. May be as much as five hours. Child can stop and then resume in the act of micturition. May have difficulty initiating release.

3 YEARS—*Bowel* Tendency to withhold and postpone. Daily movement may occur in afternoon. Child asks for and accepts help.

Bladder Well routinized. Accepts assistance if needed. Few accidents. May be dry all night; may wake by himself and ask to be taken to toilet.

4 YEARS—*Bowel* This function has become a private affair. But there is curiosity about the functioning of others.

Bladder Still routinized but may insist on taking over routine himself. Curiosity about strange bathrooms.

5 YEARS—*Bowel* One movement a day, usually after a meal, most commonly after lunch but may be after supper. When irregular, may show increased constipation. Many still need help with wiping.

Bladder Takes fair responsibility but may need reminding during day. Few daytime and only occasional nighttime accidents. Less reporting to mother. A few girls have reddened genitals. Many waken for night toileting and report to parent.

6 YEARS—*Bowel* Time of occurrence variable. Many have one movement a day usually after lunch though may be earlier. Some now have in early morning or at night. Some may be unable to complete at one time. Functioning may be rapid. Occasional accidents. Uses words suggestive of function such as "stinker," etc.

Bladder Mostly takes responsibility though may have to dash.

Accidents are rare and if occur child is disturbed by them.

May need reminder before going out to play.

Some giggling at sound of urine stream and may mention this function in a humorous or angry attack.

Some require night toileting, but these can attend to themselves.

PERSONAL HYGIENE

7 YEARS—Bowel One regular movement a day, consistent with own individual timing, usually after lunch or after dinner. A very few have a movement at school; many wait until they reach home in afternoon.

Bladder Definite increase in span. Accidents rare. May forget to go to bathroom at times such as before school in morning but accepts suggestion. Only a few now need to get up at night and these can care for themselves.

8 YEARS—Bowel Two groups: one functions after breakfast, the other after supper.

May now be able to function at school if necessary. On occasion may have a rapid release.

Bladder Manages by himself with occasional reminder before he goes out or on a trip. May have to urinate before or during an unpleasant task.

9 YEARS—Both functions are well under child's own control. One or two movements a day—usually after breakfast or late in day. Rarely needs to be reminded to go to the bathroom.

§4. BATH AND DRESSING

1 YEAR—Bath Any time of day; often late afternoon.

No longer interested in water play or gross motor activity. Now plays with washcloth, soap, water toys.

Dressing Interest in taking off hat, shoes, pants.

Cooperates in dressing: puts arm into armhole or extends leg for pants.

18 MONTHS—Bath After supper. May be brief periods of resistance to bath.

Dressing Removes mittens, hat, socks; unzips zipper.

Cooperates in dressing: puts on shoes.

2 YEARS—Bath Likes to help wash himself. May prefer washcloth to water toys. Likes especially to wash and dry hands.

Dressing Removes shoes, stockings, pants. Likes to undress.

Can put on some clothes though may put both legs in one pant leg and may get hat on backward.

Cooperates in dressing.

2½ YEARS—Bath Evening bath. Child enjoys it. Wants to "take over" even though not very capable.

Interest in fixtures and rituals built up around faucet, plug, etc.

Slides back and forth in tub. Less interest in mere washing.

Dressing Better at undressing than at dressing: can take off all clothes.

Can put on socks and perhaps shirt, pants, and coat though not always accurately.

Allows mother to lay clothes out, correctly oriented.

May be completely independent or may demand total help. May run away as he is being dressed.

BATH AND DRESSING

- 3 YEARS—*Bath* Fewer bath rituals. Child insists on washing self, at least in part.
Does not like to get out of the tub.
Dressing Undresses himself rapidly and well.
Can put on pants, socks, shoes, sweater, dress. Can unbutton front and side buttons.
Cannot tell front from back or lace shoes, though might try.
- 4 YEARS—*Bath* Now an easy routine. Child can wash though mother needs to supervise lest he get marooned on one part of body. Can dry self in part.
Dressing Dresses and undresses with little assistance, especially if clothes are laid out.
Can distinguish front from back, lace shoes; may button front buttons.
- 5 YEARS—*Bath* Can with encouragement and reminder wash face and hands before meals.
Cannot bathe self, though tries to participate. Likes to wash parts of body—hands and knees.
Can scrub fingernails with a brush but cannot cut or file them.
Dressing and Care of Clothes Dresses self completely, lacing shoes, buttoning front buttons. Cannot button back buttons or tie shoe laces.
Motivation may be lacking. "He can but he doesn't." Mother responsible for selecting clothes, laying them out, picking them up after they have been removed.
Careless about clothes.
- 6 YEARS—*Bath* A few can bathe themselves if mother gets tub ready. Many need to be bathed entirely. Some wash own arms and legs.
Many do not like bath—or other routines.
Dawdling in bath. May refuse to leave till all water has gone down drain.
Most wash faces and hands before meals, if reminded.
Dressing and Care of Clothes Can dress self except for tying shoe laces and buttoning very difficult buttons. If they do tie shoe laces, tie them too loosely.
May need some help and is unwilling to accept this help. Mother needs to be nearby to give some assistance.
Dawdling.
Boys brush hair; girls need to have hair combed.
Careless about clothes even though may be clothes conscious.
Drop clothes off as they remove them, or fling them about.
Not responsible for keeping clothes clean and tidy, except for a few girls.
Mother needs to select clothes, and may need to lay them out.
Accessories are frequently lost.
- 7 YEARS—*Bath* Washes face and hands before meals if he hears mother's reminder, though he may protest.
Some bathe without help and with only a little supervision. Others still need considerable direct help or may prefer to be bathed.
Dawdle in tub.
Girls still like to be clean and neat; some boys prefer not to be.

PERSONAL HYGIENE

Dressing and Care of Clothes Many can dress without any help if clothes are selected for them. Others dawdle, lack interest, and need help. May dawdle till he gets ready to dress, then actually dresses quickly.

Variable in appearance. Some girls like to look neat; children often neater than at eight; some boys like to look sloppy.

Still careless about clothes: drop them as they remove them; do not report tears.

A few put away clothes after removing them; hang up pajamas.

Can tie shoe laces but does not like to bother.

Slow and distractible about dressing. May suddenly speed up and finish.

8 YEARS—*Bath* Washes face and hands less thoroughly than when younger, because in a hurry. Does not yet wash spontaneously. Needs to be reminded but insists on mother wording reminder in a certain way, just a hint.

Can keep fingernails clean and may be able to cut nails on one hand.

More than half now bathe themselves. May even draw own tub. Others need help.

Dawdle in tub, playing with soapsuds, sliding back and forth in tub. May be slow to get to bath but likes it once in tub. Likes warmer water and feeling of water on skin.

Dressing and Care of Clothes Can dress without assistance. Can choose what dress or suit to wear and may be able to select out-of-door clothing suitable to the weather.

Girls with braids still have hair combed.

Some children (mostly girls) can take good care of clothes, hanging them up, or piling on a chair on removal. Some take full responsibility: select clothes, hang them up, put dirty garments in hamper, report on tears or missing buttons.

Many are completely careless. Clothes may be dirty and torn, and not tucked in.

May hang up clothes at night, but not hang up outdoor clothes in daytime.

No longer allows mother to lay out clothes, and may insist on selecting wearing apparel himself.

Can and do keep shoe laces tied without reminder.

9 YEARS—*Bathing* Is not resistant to a bath. Bathes two or three times a week.

Is fairly independent but likes to have an adult around. He still needs reminding to brush teeth well and wash hands thoroughly.

Dressing and Care of Clothes Does complete job of dressing.

Boys and girls are interested in doing their own hair, but the majority do not do it completely until ten years of age, and then only if it is uncomplicated.

Is careless with clothes, and apt to throw them around. Not concerned about how clean they are. Fairly good at reporting tears and holes.

§5. HEALTH AND SOMATIC COMPLAINTS

18 MONTHS—Convulsions may accompany illnesses, especially those with high temperatures.

21 MONTHS—Elimination difficulties; frequency of both functions; diarrhea common.

HEALTH AND SOMATIC COMPLAINTS

2½ YEARS—Elimination difficulties. Long retention span; constipation more common in girls.

Frequent colds with ear complications, especially in slow speech children.

Wants to be carried and treated like a baby (33 months).

3 YEARS—Expresses fatigue by saying, "I'm tired."

4 YEARS—May have one cold right after another, all winter.

Stomach ache in social situations.

Needs to urinate in difficult situations or at mealtimes.

May have "accidents" in emotional situations.

Knocks out front teeth if falls.

Breaks collar bone if falls (4½ years).

5 YEARS—Good, or even excellent health is characteristic.

Many have only one or two colds all winter.

Some increase in whooping cough, measles, chicken pox.

Occasional stomach aches or vomiting in relation to disliked foods, or just prior to elimination.

Constipation—girls.

5½ YEARS—Complains that his feet "hurt" him.

Some have frequent colds.

Headaches or earaches beginning.

Stomach aches with some nausea and vomiting in connection with school.

Somatic symptoms may appear after a week or two of school.

Whooping cough, measles, chicken pox the most common communicable diseases.

Hyper-sensitivity of face, head, neck region to washing, hair combing, etc.

Child may endure large pains yet fuss about a splinter or nose drops.

6 YEARS—More susceptible to diseases and sicker with illness than earlier.

Frequent sore throats, colds, with complications (lung and ears); increase in allergies.

Chicken pox, measles, whooping cough. Diphtheria and scarlet fever; German measles and mumps.

Stomach aches and vomiting in connection with going to school.

Toilet "accidents" with over-excitement.

Breaks arm if falls.

Hyper-sensitivity of face, neck region if washed or touched. (Some become hysterical with laughter if tickled.)

Increased redness of genitals—girls.

7 YEARS—Fewer illnesses than at six, but colds of longer duration.

German measles and mumps frequent. Chicken pox and measles may occur.

Complaint of headache with fatigue or excitement; complaints of muscular pain.

PERSONAL HYGIENE

Minor accidents to eyes, but fewer gross accidents; eye rubbing.
Extreme fatigue.

5 YEARS—Improving health. Fewer illnesses and of shorter duration. Less absence from school because of illness.

Increase in allergies and otitis media.

Headaches, stomach aches and need to urinate in connection with disagreeable tasks.

Accidents frequent; from falls, drowning, and in relation to automobiles and bicycles.

Breaks leg if falls.

7 YEARS—Improving health and few illnesses, but marked individual differences.

Some have a prolonged illness or show marked fatigue.

Very few general somatic complaints, but innumerable minute ones related to the task at hand (eyes hurt when tested; hands hurt when gripping); often say "It makes me feel dizzy."

§6. TENSIONAL OUTLETS

1 YEAR—Thumb-sucking strong, with or without accessory object. In daytime, just before sleep, and during the night.

Transient and somewhat accidental stool smearing.

Pre-sleep rocking in crib, bed shaking, head banging or head rolling.

Handling genitals and possibly some masturbation, usually very slight.

Crying.*

8 MONTHS—Thumb-sucking reaches a peak. May go on for several hours a day as well as just before sleep, or even all night.

Occasional episodes of stool smearing.

Rocking, bed shaking, head banging or head rolling may occur.

Furniture moving. Takes objects out of bureau drawers. Grabs at objects.

Sit-down temper tantrums.

Tears books or wall paper.

21 MONTHS—Tears bed apart.

Removes clothes and runs around unclothed.

2 YEARS—Thumb-sucking less during the day. Has a positive association with hunger, frustration, fatigue, excitement.

May be some stool smearing.

Rocking, bed shaking, bouncing, head banging, or head rolling. Many pre-sleep demands.

Fewer tensional outlets at this age.

Left alone in a room, removes everything from drawers and cupboards.

* For crying gradient see Expressional Behavior.

TENSIONAL OUTLETS

2½ YEARS—Thumb-sucking less during day. May be associated with an accessory object.

At night strongly associated with accessory object.
Rocking, head banging, in some. Some masturbation.
Stuttering may come in with high language children.
Tears wall paper.
Completely disrupts playroom, both large and small objects.
Sudden aggressive attacks—may "sock" a stranger.
Temper tantrums.

3 YEARS—Thumb-sucking, associated with accessory object, at night or occasionally in daytime. Can tolerate having thumb removed from mouth during sleep.

Fewer tensional outlets.
May wander around house during the night.

3½ YEARS—Thumb-sucking at night with accessory object. Can suck in daytime without object.

Considerable stuttering.
Nose picking, fingernail biting.

4 YEARS—Thumb-sucking only as he goes to sleep.

Out of bounds behavior:

Motor—run away, kicks, spits, bites fingernails, picks nose, grimaces.
Verbal—calls names, boasts and brags, silly use of language.
Nightmares and fears.
Needs to urinate in moments of emotional excitement.
Pain in stomach and may vomit at times of stress.

5 YEARS—*Home* Not much tensional overflow. Often not more than one type in any one child.

No total facial grimace; more broken up into segments.

Hand to face: nose picking, nail biting.

Thumb-sucking, before sleep or with fatigue, often without accessory object.

Eye blinking, head shaking, throat clearing at meals.

Sniffing and twitching nose.

School or Examination Little tensional overflow: hand goes briefly to various parts of face and body.

Grasps thighs or scratches arm or leg. Pulls at clothes.

General restlessness, lifts buttocks from chair.

Nasal discharge; needs to blow nose.

5½ YEARS—*Home* Number and severity increasing. One child may show several types of overflow.

Hand to mouth, nose picking, nail biting increasing.

Some throat clearing, sometimes tic-like.

Mouthing of tongue and lips, tongue projection.

Less pre-sleep thumb-sucking.

PERSONAL HYGIENE

School entrance may cause increase in stuttering, nail biting, and thumb-sucking.
School or Examination Many hand to face gestures, especially hand to mouth.
Some tongue protrusion, pulling mouth at corners, mouth pursing, biting lower lip.
Chews, bites or taps pencil. Chews hair.

6 YEARS—*Home* Numerous and quite constant. (Increase begins at $5\frac{1}{2}$.)

Total body wriggling with thrusting of legs and kicking at table legs and piano, swinging arms and striking out or pushing.

Clumsiness, "falls over a piece of string," also falling off chairs.

Facial grimacing, throaty noises, gasping, sighing and tongue mouthing.

Hands in almost constant activity, especially about the face: chewing fingers, ties, hair, pencils; picking nose; biting fingernails.

Also an occasional outburst of screaming and temper tantrums.

May be an increase in stuttering.

School or Examination Overflow in mouth region: tongue extension and mouth-ing, clicking, blowing through lips, biting lips. Throat clearing and throaty noises.

Biting, chewing or tapping pencil.

Gasps with excitement.

Hand to mouth lessening.

Shifts legs: jiggling, knocking knees together, tapping feet.

Throwing and kicking.

Eyes shift horizontally.

7 YEARS—*Home* Very few tensional outlets reported. Old ones dropping out.

With fatigue or absorption may still suck thumb, pick nose, bite nails or stutter, but are attempting to control.

Touch and manipulate objects: rubbing, tapping, jabbing, raking.

A few show tensional chorea-like movements.

Eye rubbing, scowling, some blinking.

Make throaty noises such as grunting, whistling.

Gross bodily outlet: hangs from doorway, tilts chair back, athletic stunts.

School or Examination Less hand to mouth, though some fingering of teeth.

Less tongue protrusion, but mouth movements, lip pursing, whistling.

Hands finger pencil, roll it over mouth, rub or tap it on table, and usually drop it.

Hands rub over desk. Touching anything seen.

May rest head on hand, elbow propped on desk, or put head down on arm.

Throaty noises, grunting, whistling.

Jiggling of legs but less kicking, though may kick people.

Oblique or horizontal eye thrusts.

8 YEARS—*Home* Very diffuse. Any of the earlier patterns may appear: blinking, nail biting, eye rubbing, but all less persistent.

A few persistent thumb-suckers still suck during reading or listening or during illness or fatigue.

Crying with fatigue.

Making faces when given unwelcomed command.

Stomach ache and headache. Need to urinate before unpleasant task.

School or Examination All five to seven year patterns of overflow are seen, and many in one child during some one situation.

Now more expression through verbalization and gesture.

Grimacing, scowling, raising eyebrows, eye rolling, humming, smacking lips.

Leg jigging prominent, though may be controlled by pressing feet against furniture or crossing knees.

Fiddling with gadgets. Shoving.

9 YEARS—*Home* Marked individual differences. Some boys "let off steam" by wrestling around. Girls may wander around house, restless and moody. Fiddle around. can't sit still.

Some growl, mutter, sulk, find fault, stamp feet, or may actually destroy things.

Specific personal habits fewer,—cry, pick at self, suck tongue, pick at hangnails.

School or Examination Pianoing of fingers; fine distal activity.

Draws in breath, blows lips and cheeks; or hums, sings, whistles, whispers.

External rotation of leg and crossing ankle to knee; jiggles and swings legs.

Grimaces with failure; smiles and laughs at material and at self.

Large gesture of clapping hand on head; or tiny gesture of plucking at eyelid.

EMOTIONAL EXPRESSION

A CHILD cannot tell us exactly how he feels, even after he has learned to talk. For that matter, the adult has difficulty in describing his own emotions. Emotions are elusive. They are not entities which can be neatly classified and labelled. The dictionary does not have labels enough to do justice to their infinite variety.

Nevertheless, the emotional life of the child is not altogether hidden from view. It comes to expression in numerous tokens of visible behavior. If we read these outward signs aright we gain a glimpse of his inward states of feeling. In this sense his expressional behavior is a form of communication. It constitutes a kind of radar screen which reflects his inner electronic storms and tensions!

If the outward activity consists of a blinking of the eyes, chewing

of the lips, or jiggling of the feet, we may think of it as a kind of tensional outlet,—an overflow escape. In the previous chapter we have shown how these simple forms of tensional behavior reflect the “somatic conditions” of the organism. One cannot draw a sharp line between tensional behavior and emotional expression. So-called emotion arises from a complex state of tensions: a) The organism (i.e. the child) assumes an attitude of expectancy or a readiness to act; b) the expected does not happen immediately; the intended action is delayed; c) this suspense combined with readiness produces a peculiar state of tension which is felt as an emotion; d) the tension, whether pleasurable or painful, expresses itself in characteristic ways,—tears, frowns, fists, screams, smiles, shouts, blushes, gasps, etc., etc. The expressional reaction is so closely identified with the felt emotion that the famous psychologist James ingeniously suggested that we do not cry because we are sorry, but that we are sorry because we cry. A recent writer (Nina Bull), however, suggests the thesis that the sorry feeling comes *with* the readiness to cry and not because of the actual crying. This might explain why a “good” cry does indeed relieve the tensions of the sorriness.

Emotion is not an entity; it is a process. From the standpoint of child guidance we must consider the total sequence of the process. The premonitory and preliminary phases of the emotional sequence are often more significant than the end products. They are more subtle and pliable, making preventive measures possible. On the other hand we may also be thankful, within limits, that the child declares himself, now and then, with an outburst of emotional expression, which after all constitutes his most basic language. As he grows older his expressional behavior becomes more refined; he uses words as well as gestures, not only for communication, but also as controls, symbols and embodiments of his emotional life. And thus his “emotions” grow. They take on pattern and texture, through dynamic relationships with his ideas and intellectual orientations. Emotions are not independent forces which in some mysterious way take possession of the child. They are structured modes of reaction which, like his perceptions, yield to the organizing

influences of experience and education. They have had an awesome evolution in the history of the race. They have a biographic development in the history of the individual.

The subjoined growth gradients of affective attitudes, crying, anger and aggression will strongly suggest their ancient racial background. But we should point out that our discussion of the child's "emotions" is not confined to the present chapter. Emotional processes pervade all his life, private and social, genial and elevating, as well as violent and disturbing. For full perspective we must consider in later chapters the emotional formations which pertain to fears and dreams, to the child's play life, to his interpersonal relationships at home and school, his ethical and philosophic reactions to good and evil, and to the true and beautiful. But inasmuch as emotions are not self-subsisting entities, we shall focus our attention throughout on the processes and the patterns of development.*

CRYING

Life begins with a cry. During the first fortnight which he spends in a hospital nursery, the new-born baby cries on the average about two hours of each day. This is his most eloquent expressional behavior. We know that he does not cry without reason. He cries from hunger, pain, discomfort,—and also from denials which are not too well understood. If we arrange his day so that he spends more time with his mother and less time in the congregate nursery, his crying decreases in amount and insistence. Such a rooming-in-arrangement (as described in the *Infant and Child* volume), shortens the interval between distress and attention;

*The concept of growth is the indispensable key to the comprehension of the emotional characteristics of the child. We are indebted to Charles Darwin for important observations which he made on his several children. The tenderness and sympathetic insight which he displayed as a parent are well known. "My first child," he writes, "was born December 27, 1839, and I at once commenced to make notes on the first dawn of the various experiences which he exhibited, for I felt convinced, even at this early period, that the most complex and fine shades of expression must all have had a gradual and natural origin." Darwin studied these shades for thirty-three years and then published his classic volume, "The Expression of the Emotions in Man and Animals." Indeed, his patient investigations of emotional expression were marshalled to show that man is derived from lower animal forms.

and if the baby is reared on an individualized self-demand schedule throughout the first year his various cries become more meaningful to his mother. He does not need to assert himself too violently and too frequently. He is permitted to "oversleep"; his hunger cries are promptly answered. Thereby he is granted so many experiences of satisfied expectation that he acquires a sense of security, a simple kind of faith in the universe. This sense of security is comparable to a felt "emotion," even though it is not as dramatic as a fit of rage.

Crying tends to arouse so much emotion in the adult that it is easily misconstrued. In earlier centuries it was regarded as one of the major signs of the imperfection, "the pettishness" of childhood. It figured in the discussions of infant damnation. St. Augustine believed in "hereditary guilt," but held that the crying of a baby is *not* sinful. Susannah Wesley took matters into her own efficient hands. She relates of her numerous offspring, "When turned a year old (and some before) they were taught to fear the rod and to cry softly. . . . and that most odious noise of the crying of children was rarely heard in the house. . . ."

But this was over two hundred years ago. A more rationalistic view is slowly gaining ground; because the liberating concept of organic evolution has made us conscious not of hereditary guilt, but of the biologic basis of the frailties of the child's nature. In the light of that liberating knowledge it is almost incredible that so many children should still be severely punished *because they cry*! Yes, children are punished *because they cry*!

Crying is expressional behavior. It is a symptom, not a vice, and it can be understood only if interpreted in terms of its developmental determinations. Individual differences of temperament, fatigue and physiologic irritability will naturally influence the incidence of crying episodes; but maturity factors are primary. In the first few months the infant cries on slight provocation; a mere startle may evoke a screaming cry. The infant may wake with a hunger cry; in time he also cries or fusses before he goes to sleep, as though he were actively perfecting his growing ability to stay awake. At about the age of 16 weeks there is a

quieting down; there are fewer crying episodes and they are shorter. Why? Because the infant is now in a state of relative equilibrium, as shown by many other aspects of his behavior. He is under less stress and tension. With new growth increments his equilibrium again becomes less stable. Such developmental fluctuations occur throughout the first ten years of life, with an overall trend toward diminution of frank crying as a mode of emotional expression. The 9-year-old usually does not cry unless he is extremely tired, or severely hurt, physically or mentally.

The characteristics of the act of crying and of the associated behavior also undergo some developmental changes. At first the cry is tearless and the vocal component of call is prominent. Later come tears, sobs, lump in the throat, and a large variety of body attitudes and motor activities. The physiologic reactions are similar to those which accompany the rejection of food. The mechanism of weeping deeply involves the digestive apparatus, whether it registers pain, displeasure, sorrow, helplessness, resignation or self-abasement. In the crying act the child tends to use the motor and verbal equipment available to him at his stage of maturity. A very premature infant may exhibit all the facial contortions of weeping which culminate, however, in a perfectly soundless cry or a faint bleat. The lusty neonate cries with a scream and thrashing of legs and arms. The 8-month-old infant may shift precariously from crying to laughter. Ten months later he uses his gross postural muscles tantrum-wise to supplement his cry. The 3-year-old is more equable. The 4-year-old cries rather freely, and supplements with whining verbalization. The many pattern changes which take place in the pre-school years suggest that the child rarely deserves the epithet "cry baby"!

The 5-year-old already has himself much better in hand. His cries are typically sun showers. His moods are fleeting. He can consciously hold back tears. At six years we witness again the phenomenon of paradoxical regression. The child "reverts" to tearful tantrums and outright bursts of loud crying; not because he is sinking to a lower level,

CAUSATION OF CRYING

but because, paradoxically, he is in transit toward a higher. This is no time to shame him for being a cry-baby. (Crying itself is not the vice, but an outward sign.) And, of course, he should not be punished *because* he cries.

At seven years he is usually able to pull himself together; but he is in a sensitive phase which results in overtones and moods of sadness, and sometime in broken-hearted sobs. There can be no doubt that he has problems of emotional organization, for he is variably sweet and good, or cross and tearful. He even declares, "I feel like crying," an infallible sign of increasing control. The 8-year-old further extends the control by dramatizing his emotions, and curbing his tears after they well up. By ten years the child, though not a stoic, is still nearer to an adult level of self-control.

Throughout the period of infancy and early childhood the causes of crying are diverse. Sometimes they seem very trivial and apparently superficial because the infant readily changes from crying to laughter. But this should rather remind us of the underlying immaturity of the child's nervous system.

A wise quatrain from Samuel Johnson calls for citation here:

If the man who turnips cries
Cry not when his father dies,
'Tis a proof that he had rather
Have a turnip than his father.

ASSERTION AND ANGER

Self-preservation is the first law of life. The second law is self-expansion. When an infant declares himself on one or both counts with a vigorous burst of crying, we are likely to say, "The Baby is showing his temper." Some babies, of course, show a larger amount of this so-called temper than do others; but no normal child is altogether devoid of it. Temperaments and tempers differ. Ages likewise differ. As a child grows older, he displays his temper in new modes of expressional behavior,

by violent and then less violent bodily attitudes, by facial contortions, by gestures, words and muted words! With maturity he advances from one order of self-assertion to another. If at a later school age he persists unduly in using the expressional channels of the nursery, his behavior is properly regarded as infantile. Whatever his mode of expression he behaves as he does, not because he has a "temper," but because he has organized his personal-social reactions in a given manner.

In the aftermath of the most tragic of all wars the subject of Anger and Aggression takes on a solemn importance,—even in relation to child development. In the early patterns of naive rage and pugnacity we see not only retrospectively the vestiges of the combativeness of pre-human progenitors; we see also the foretokens of organized human warfare. If we ever hope to control the primary origins of systematic war, we must comprehend the mechanisms of anger and aggression in infancy and childhood.

We cannot, of course, annihilate these mechanisms by any known device of appeasement or exorcism. We can, however, forestall the worst consequences by adequate measures of developmental guidance. Even without adequate guidance there is a natural tendency toward refinement in expressional manifestations and provocative causes during the pre-school years. The infant in a fit of rage thrashes arms and legs and arches his back; at 15 months he pulls himself forcibly free from a thwarting adult; at 18 months he cries, stamps, casts himself on the floor. In a tantrum of the first magnitude he hits, kicks and struggles furiously. Fortunately even such hopeless behavior is not beyond the reach of psycho-technology! The 18-month recalcitrant is responsive to gross motor humor: his struggle dissolves if you pick him up as a bag of rags with a light-hearted, executive maneuver. He cannot be controlled by hypnotism or solemn injunctions. The whole episode might have been avoided in the first place by utilizing methods of gradual transition,—for his rebellion was against a too sudden change. That was the critical maturity factor in his management.

At 21 months the anger pattern is already somewhat different. He is

disappointed by an unwitting omission in his accustomed bedtime routine; he reacts by freezing into resistance or by "howling." The reason is so obscure that the parents are sorely perplexed. But from the child's standpoint there is a reason: You don't brush your teeth unless you are in your pajamas.

At two-and-a-half years he may resent interference with his activity or with his possessions. His tantrum reactions are more aggressive, especially when precipitated by his mother. He may be destructive with objects and surroundings, not excluding wall and wall-paper. In disputes over toys he may attack other children with rather indiscriminate hitting, biting, kicking. (We are describing his conduct, without condoning it. Our readers will grant that such things can happen, and they will agree with the gentle Darwin when he says: "Everyone who has had much to do with young children must have seen how naturally they take to biting, when in a passion. It seems as instinctive in them as in young crocodiles who snap their little jaws as soon as they emerge from the egg.")

Inasmuch as we are compelled to report yet other manifestations of anger and aggression we should, in further parentheses, assure the reader that these drastic forms of emotional expression are amply offset by more estimable forms of behavior detailed in later chapters. But at the moment, we must proceed realistically with manifestations of defiance and aggression.

The age of three, being a period of relative equilibrium, shows a temporary decline in physical aggressiveness. Interference with plans and belongings still arouses anger; but by and large the 3-year-old displays much more self-control than he did several months earlier. He also uses language to a greater degree to solve his personal emotional problems. At five years and at seven, eight and nine there is a similar constructive or substitute use of language with a diminution of frank physical aggressiveness. The stimuli which arouse the child's anger are becoming more social in context and vary with the development of his personality.

The relationships between language and aggressiveness are rather complex. Words should not be taken at their face value when first used by children. The 3½-year-old, flourishing his new found verbal sword, says "I'll cut you in pieces." To be sure, he may be angry at the moment; but that he is truly sadistic may be honestly doubted. In his recent past he may have dismembered a ginger bread man, but his verbal threat is probably not as gory as it sounds. Indeed, there is a strange, shallow matter-of-factness about young children which often causes them to use words glibly at the very time when they least appreciate the social import of the words. For example, a child may talk blithely about his mother's death, until he begins to comprehend. Then he denies that his mother will die, or he worries in silence. Children's silences are often more eloquent than their words.

At five-and-a-half and at six years, aggressiveness takes both physical and verbal forms: "You're a dope;" "I'll shoot you;" "Get out of there!" "I wish you were dead,"—illustrate the winged missiles which are directed toward friend and foe. Some of these missiles may even be hurled at grandmother. Even so, the roof of a peaceful household should not fall. Now, if ever, one should calmly consider the true and, in essence, temporary psychology of the crisis.

Temporary in the sense that the 7-year-old already shows less crude and less frequent aggressive behavior. He has, or should have, very few tantrums, and he offers less resistance to his mother's commands. He is not equally pacific with his siblings; and on occasion he may even throw a stone, which is indeed an ancient behavior that probably antedates the stone age. But the 7-year-old is more in character when he mutters an aspersion and withdraws from the scene of irritation. Withdrawal is, to be sure, the opposite of aggression; it partakes less of courage and more of fear; but it has a useful function in the economy of development, to say nothing of the perfection of morals.

The typical 8-year-old is inquisitive rather than boldly aggressive. He illustrates the second, rather more than the first law of life. He accomplishes his self-expansion by fluid, multiple contacts with his social

environment. He invades his environment, not to dominate, but to gain new experiences, new insights. There is a quality of aggression in his argumentativeness, his alibis, and his occasional epithets and disagreeable remarks. But when he is eagerly and loudly confabulating with his confreres he does not wish to quiet down on command. There is little animus in his heated discussion. He is really rising above brute levels. He and the 9- and the 10-year-olds at their best, give encouraging evidence of human capacities which make for peace and mutual understanding, instead of war and bloodshed.

By the same token we must look to the period from five to ten years for the developmental beginnings of juvenile delinquency and adult crime. Now that aggressive war has become a crime the psychology of childhood anger takes on impressive import. All long range policies, cultural and educational, directed toward the prevention of war must deal fundamentally with the emotional life of children before they reach the stage of adolescence, which brings forth new forces for good and evil.

THE STRUCTURALIZATION OF EMOTION

Emotions are not self-subsistent entities which in some mysterious manner suffuse or attach to patterned states of consciousness. They are themselves patterned; they are structures which grow in the same manner in which percepts, concepts, motor skills or any other configured behavior takes shape. An *emotional attitude* is simply a more or less habitual tendency to react and feel in a particular manner in a given situation. When the attitude is excessively emotional or unreasonable we call it a *prejudice*. When the attitude tends to occur time and time again in much the same way under varying circumstances we call it a *stereotype*. Racial antagonism readily becomes a prejudice or even a stereotype. *Racism* is a systematized, dogmatic attitude,—“the dogma that one ethnic group is condemned by nature to congenital inferiority and another group is destined to congenital superiority.”

These simple definitions suggest the far flung extent of the problem

of so-called "emotional education." We are dealing with structured modes of behavior which have their developmental basis in the instinctive constitution of the child; and which are only secondarily transformed or redirected by the sanctions and tabus of culture. For this reason we greatly need more knowledge of the innate determinants, racial and constitutional, of all emotional or affective traits,—particularly the traits of sociability, affection, pride, jealousy, sympathy, curiosity, competitiveness and creativeness, anger, fear and humor, which have such an important influence on the health or well-being of society.

Emotions are structured responses to concrete situations. Emotional patterns of behavior are displayed in the social settings of home, school and community. A discussion of emotions in the abstract would serve no useful purpose in the present volume. We shall therefore portray the emotional life of the growing child in terms of his specific reactions to other children, to his parents, to teacher, to school groups,—to the conjoined world of things and persons.

Anger and fear, however, are so basic that they call for special consideration. Crying and laughter likewise. We cannot close the present chapter without a brief reference to the saving sense of humor which is not only an affective response in its own right, but which plays an important role in the hygiene of the emotions,—the emotions of parent as well as of child.

In smiling, laughter and humor we are dealing with fundamental elements in the pleasurable aspects of emotional life. If crying had evolutionary roots in the rejection of food, primitive laughter was associated with the enjoyment and digestion of the feast. The well-fed infant tends to smile from sheer satisfaction; he smiles socially on the sight of caretaker at the age of 8 weeks; at 12 weeks he chuckles; at 16 weeks he definitely laughs aloud, and throughout infancy he participates in various grades of nursery humor from rollicking rough house to many kinds of peek-a-boo and mock-scare games, addressed to his eyes, ears, skin or his total physical (and mental) self. But, be it noted that both the child and his opposite must be in a playful attitude, or the nursery

LAUGHTER AND HUMOR

game comes to grief and tears, rather than to fun and laughter. Laughter, humor, relaxation reflexes and tensional behavior are all closely allied.

Children would not indulge in so much spontaneous and (apparently to us) meaningless laughter if it did not have a wholesome effect upon their behavior and mental growth. Some of this laughter might be set down as private or physiological; but it tends to spread and to increase in social situations. Even at the age of one year the child likes to repeat performances laughed at by his elders. At two years he can initiate humor and "carry on" with his playmates. At three years an abundance of laughter accompanies his play. At two-and-a-half all is not well with the world and he does not laugh quite so freely. He is caught in the rigidities of ritualism, perseveration and negativism. One might wish he were not so humorless. If the responsible adult meets this behavior with an equivalent insistent rigidity matters go from bad to worse.

Here is the ideal time to utilize the biological function of humor; namely, to dissolve tension and to increase the pliancy of the mind and to keep it from overstretching. Here humor becomes a technique in child management,—a technique which either prevents or atomizes an impasse.

The child cannot as yet summon therapeutic humor out of his own resources; but the parent can supply the lack in critical situations. Since humor is based on innate factors (instinctive and physiologic), individuals will show enormous differences in responsiveness; but this still leaves ample scope for teachers and parents. Within limits the humor sense can be educated, because with age it becomes increasingly identified with language and thought.

The early plays of Shakespeare were full of low comedy, buffoonery, mistaken identity, broad punning and rustic horseplay. Later plays show a ripening and the jester becomes an exalted humorist. A similar trend toward maturity is reflected in the humor of childhood. The 3-year-old is already refining the gross motor humor of the 2-year-old. His humor is becoming more verbalized. He enjoys the verbal play of tossing a word (like "golly") back and forth with someone who will play with

him. At five years he enjoys slapstick humor, more or less verbalized, which he himself initiates. SIX is not notably a humor age, for reasons already indicated. SEVEN somewhat ineptly perpetrates hackneyed jokes. He seems to sense the social aspect of humor and will deliberately do something ludicrous in order to get a laugh; but he is still somewhat bound by his subjectivity. He will make a better show and use of humor in another year.

The typical EIGHT has a high humor sense. He loves humor stories and relishes the way Brother Fox fools a victim. By the same token he rather likes to catch a teacher in a mistake. But the emotional fabric of the self is complicated. Particularly at home where he has a status and prestige to protect, he still dislikes humorous references to himself.

At nine and ten the humor sense, if it matures, becomes more robust. The child is not only able to perpetrate a more or less practical joke, but he can take one on himself. He may even be able to laugh off teasing,—which is an excellent achievement. Some philosophers have located the origins of humor and laughter in the domain of derision, superiority and degradation!

If then, the sense of humor is subject to the laws of growth, it will in some measure yield to training. Education in humor must come through suggestion, atmosphere and experience. At home the child has innumerable social experiences which call for impromptu humorous handling. An institutionally reared child misses out sadly because he does not have the unscheduled experiences which normal family life yields.

At school nearly everything depends upon the teacher, because humor is not an official subject of the curriculum. A vital teacher naturally and also deliberately establishes an atmosphere of cheerful give and take. In such an atmosphere humor comes somewhat by contagion. Many unpredictable social situations arise which can be exploited to release humor. There is hardly an art which does not have a place for the expression of humor in the schoolroom: drawing, music, sculpture, dancing, dramatics, broadcasting and television, but above all literature.

By literature we do not, of course, mean the *Funnies*. The so-called Comics deal rather in anger, fear and adventure as their stock in trade. They tend, if anything, to give their readers an undue, untrammelled sense of power. Whatever their merits they usually do not introduce the child to that fine territory where humor verges on philosophy.

English literature and also foreign literatures contain materials for this enriching type of humor. But much remains to be done to create new humor materials based on the developmental characteristics of the child, and his developmental needs, both moral and philosophic. The techniques of humor applied by himself and others are needed to safeguard sanity. This has always been a function of laughter and of humor.

GROWTH GRADIENTS

§1. AFFECTIVE ATTITUDES

- 4 WEEKS—Baby appears stable and relatively well coordinated.
- 8 WEEKS—Much crying and apparent emotional disequilibrium.
- 16 WEEKS—Vocalizes happily.
Smiles at sight of a face.
Seems to enjoy people, but self-contained.
- 20 WEEKS—Much disequilibrium and crying.
- 28 WEEKS—Self-contained; plays contentedly alone.
Affectionate, smiling response for people.
- 32 WEEKS—Easily becomes over-excited.
Close interplay between crying and laughter.
Fears strangers.
- 40 WEEKS—Smiles when watching or participating in nursery tricks.
Girls show first signs of coyness by putting head to one side as they smile.
Shy with strangers. Most smiling and *affectionate* with family group.
- 44 WEEKS—More fearful, less smiling, more crying.
- 52 WEEKS—The heyday of smiling and social give and take: "Where's the baby?" and other social games.

EMOTIONAL EXPRESSION

Indiscriminate *affection* and social smiling response.
Repeats performance laughed at.

- 15 MONTHS—Demanding, assertive, independent. Not in good emotional equilibrium
Discriminates against almost everyone; does not get on well with people.
- 18 MONTHS—Very mobile, with sketchy, short-lived attention span; impulsive.
Constantly moving, "into everything," busy, self-contained, independent.
Helpful in small ways.
Becoming more *affectionate* with mother. May hug doll or teddy.
May respond to gross *humor* approaches from adult: hiding, peek-a-boo, being
lifted bag-of-rags fashion.
- 21 MONTHS—Definitely lacks equipoise. Less independent.
New awareness of persons and fear of strangers.
Sense of possessiveness about own things and knows about possessions of others.
Conscious of adult approval and disapproval.
More responsive to mother, yet more demanding. Quiets with *affection*.
- 2 YEARS—Better emotional as well as postural equilibrium. More sedate than formerly.
Shy.
Non-cooperative in play; but helpful with adult.
Real show of *affection* toward mother, especially strong at bedtime. This may
spread to other adults. Even his voice has affective tones. May take affectionate
care of toys.
Possessive of his own things but *not jealous* of others.
Proud of new clothes, as shoes, etc.
Humor largely gross motor, as peek-a-boo and chasing; but may be initiated by
children themselves and may be carried on by them without adult support.
- 2½ YEARS—Disequilibrium. Extremes of aggression and withdrawal.
Child is domineering, imperious, bold. Is also rigid and ritualistic.
Is selfish, possessive and demanding.
Affection is expressed in rigid form as a kissing ritual.
May express *jealousy* of younger siblings.
Is *proud* of own abilities to do things.
Can be handled by *humor*. "No, no, no" may be answered effectively with "Yes
yes, yes."
Verbally asserts domination over members of his family.
- 3 YEARS—Good equilibrium. Happy and contented, enjoys self quietly.
Emotional as well as physical self-control.
Friendly, helpful, conforming, wishes to please. *Mildly affectionate*.
May be *jealous* of younger siblings.
Proud of own increasing abilities.
Enjoys friendly *humor*. Much laughter accompanies play.

AFFECTIVE ATTITUDES

Early gross motor humor giving way to verbal. Enjoys humorous word play. Likes riddles, and guessing. Humorous wrong guess by adult causes much amusement.

- 3½ YEARS—New unsettledness. Voice quavers, he stutters, speaks in high-pitched voice. Fears and fearful dreams increase. Leads an elaborate imaginary life with much emotion involved. Very *affectionate* toward and possessive of parent. Says "I love." *Humor* is involved in imaginary play. Tries to control emotion of others, "Don't talk," "Don't laugh." May withdraw from adult or may demand, "Hold my hand."

- 4 YEARS—Out of bounds. Quarrelsome, Argumentative. May be selfish, rough, impatient with younger siblings. Expresses *affection* at bedtime: goodnight kiss and strong hug. May be *jealous* of mother and father together. *Proud* of own products and creations. Silly boisterous *humor*. Wild laughter accompanies play. Enjoys silly rhyming, "mitsy, witsy, bitsy" and play on words. Likes to call silly names; exaggerations amuse him. Silly showing-off. Out of bounds verbalization: Tattles a great deal, exaggerates, boasts, tells tall tales, calls names, threatens, is profane, or mildly obscene.

- 5 YEARS—Serious, businesslike, realistic, literal. Well equilibrated, poised, but may be resistant. Dependent on adult (proximity of adult) company and support. Cooperative. Likes and invites supervision. Friendly, sympathetic, *affectionate*, helpful. Strong feeling for family. Likes to be with family. May be very proud of mother. *Proud* of his own appearance, nice clothes, etc. General curiosity and eagerness for information. Enjoys slapstick *humor*, which he initiates. Mother reports that he "loves" to be read to. Likes to talk and will talk to anyone. Some talk "constantly." Excited in anticipation of future. Knows own mind and sticks to it. Calling names: "skunk," "rat," "I'll kill you."

- 5 YEARS—Highly emotional. Marked disequilibrium between child and others. Expansive and undifferentiated. Good or bad; sweet or horrid; adoring or cruel. He knows "everything"; boasts, brags. Likes praise and approval; resents correction and is easily hurt by a cross word. Loves or hates mother. Rapidly explosive with crying, strikes out physically or verbally, or has temper tantrums. Quarrelsome, argumentative, explosive, rebellious, rude, "fresh," stubborn, brash. Noisy, boisterous and easily excitable.

EMOTIONAL EXPRESSION

Silly, giggling, grimacing, showing off.
Resents direction, but is also over-conforming.
Domineers, blames and criticises others, alibis.
Glowers and glows; has fire or a twinkle in his eye.
At times angelic, generous, companionable.
Jealous of possessions of other children.
May not be too responsive to *humor* at this age.
Uses language aggressively: calls names, threatens, contradicts, argues, uses mild profanity.

7 YEARS—A "feeling" age. Gets on better with others, though disequilibrium within own feelings.

Serious, absorbed, thoughtful, inhibited, empathic.
Sets too high goal for self.
Self-protection by withdrawal from situation. "Deaf" ear.
Anger directed toward self. Throws or breaks something if he cannot perform.
Often moody, sulky and unhappy.
Sensitive to praise and blame. Cannot take compliments, but can be reassured.
May not be able to accept *affection*, though he gives it.
Anxious to please and considerate of others.
Jealous of privileges or abilities of siblings.
Little sense of *humor* and cannot be handled with *humor*.
Worries about place in family or school group.
Uses language complainingly: nobody likes him, people are mean and unfair, he has nothing to play with. If angry may retreat into silence instead of, as earlier, into angry verbalization. May be given to "screeching." Complains of headache.

8 YEARS—Tendency to disequilibrium between self and others.

Attacks life with some courage, also feels he is being attacked.
Thinks he knows "everything" but beginning to recognize that others may know more.
Impatient especially with self. "Snippy," careless.
Dramatizes anything. Tall tales are dramatic but usually with a grain of truth.
Demanding of mother; fresh and rude, or strongly *affectionate*.
Some *jealousy* of mother and father being together.
Critical of others and also of self. Selfish and demands much attention. Bossy or helpful. Quarrelsome.
Bursts into tears; has laughing jags.
Often gay and cheerful.
Very curious about personal activities of others: phone calls, conversations.
Feelings of guilt.
High *humor* sense. Enjoys humor in stories, especially when one person is fooled by another, making someone uncomfortable.
Likes to catch teacher in a mistake. At home dislikes humorous references or jokes about himself.

CRYING BEHAVIOR

Out of bounds verbally: talks a great deal, exaggerates, boasts. Raises voice when angry or tired.

9 YEARS—Becoming more independent. Better equilibrium.

Quick extreme emotional shifts, short lived.

Impressionable, reasonable, explosive, empathic.

More responsible, independent, cooperative, dependable.

Evaluates own performance, may be disgusted or apprehensive about own actions.

May be ashamed of past behavior.

Wants things to be proper. Disgusted with others who deviate even slightly from his standards.

Gets mad at parents, but is also *proud* of them, brags about them, *affectionate* toward them.

Enjoys competition.

Protective and loyal to friend or to younger sibling.

Responds well to compliment.

Has passions for certain activities. Often overdoes to point of fatigue.

Many complain a good deal: headaches, eyes hurt, hand hurts, etc., while doing a task, but continue to do required task.

Enjoys *humor*—if he thinks something is funny, repeats it over and over. Likes surprises in a story. Beginning to accept jokes about self.

Uses language to express subtle and refined emotions: disgust, self-criticism, pity, envy.

§ 2. CRYING AND RELATED BEHAVIORS

1-4 WEEKS—The hunger cry almost universal.

4 WEEKS—May fuss half an hour a day. May cry one or two hours a day.

4-12 WEEKS—Differential crying for different causes. Crying before sleep as well as hunger cry.

8-16 WEEKS—Much crying and fussing, but less than formerly. Perhaps one hour a day. May cry at almost any provocation.

16 WEEKS—Brief period of equilibrium. Less crying and for shorter periods.

20 WEEKS—Stage of disequilibrium. Any stimulus—the mere appearance or disappearance of an object—may evoke crying. Transitions difficult.

28 WEEKS—Less crying. May cry if left supine, if he prefers sitting.

32 WEEKS—Instability of emotional make-up suggested by close interplay of crying and laughter.

40-52 WEEKS—Less crying. Cries more with specific irritations or frustrations. May cry for attention.

EMOTIONAL EXPRESSION

- 15 MONTHS—May fuss or vocalize when disturbed, instead of crying.
- 18 MONTHS—Tantrums, with violent crying, if things go wrong.
- 21 MONTHS—Crying very violent—"bawling." "Frozen" into inactivity by inability to verbalize.
- 2 YEARS—Child is sensitive, dependent, tearful.
- 2½ YEARS—Crying from temper. Stormy. May awake crying after nap. Whining.
- 3 YEARS—Less crying and less show of temper.
- 4 YEARS—Much crying. Also may whine if his wants are not met or if he has nothing interesting to play with.
- 5 YEARS—Less crying, though may cry if angry, tired, cannot have own way. Crying now of shorter duration and can sometimes be controlled, tears held back.
Little moodiness. "Gets right over" crying.
Some whining, though less than at four years.
- 5½ YEARS—Abrupt onset of temper tantrums, with loud angry crying.
Much crying at routines. Also excitement and fatigue bring on crying.
Some moodiness, whining, expression of resentment.
- 6 YEARS—Tears and tantrums. Tantrums involve loud crying. Adult can often get child to laugh when he is crying.
Child is called a "cry-baby"; he cries at "any little thing."
Some whining and fussing, but more outright crying.
Brave about real injuries to themselves but cry at small hurts.
- 7 YEARS—Less crying. Becomes moody, sulky, "in the dumps."
If cries, sobs broken-heartedly, but can control crying and can pull himself together.
Sensitive about crying and ashamed to be seen crying.
May merely say, "I feel like crying."
Moods very variable: sweet and good, then cross and tearful.
May cry if spanked or spoken to sharply; or if he is unhappy or cannot make up his mind. Less because of routine requirements or small disturbances.
- 8 YEARS—Less crying, but sensitive, feelings hurt, and tears well up.
Feelings easily hurt by careless remarks or by criticism.
Less temper and less moodiness. But may say, "I'm not in the mood to do so and so."
Dramatization of own emotions.
- 9 YEARS—Cries only when emotions are over-taxed. May then cry if angry, over-tired, feelings hurt, or if wrongly accused.
Complaints of: "That's no fair."

§3. ASSERTION AND ANGER

- 1-12 MONTHS—Loud angry crying; thrashing of arms and legs.
- 15 MONTHS—Casts objects.
Demands to do things himself, in his own way.
Pulls free from adult grasp.
Anger chiefly aroused by interference with his physical activity.
- 18 MONTHS—Tantrums: cries, casts self on floor, hits, kicks, struggles. Caused chiefly by resistant objects, (may kick the objects); also caused by imposed transitions. Inadvertently destructive of objects.
Rough with children or animals: stamps or steps on them; pokes, pulls, pushes them. Does not clearly distinguish animate from inanimate.
- 21 MONTHS—Pulls hair, knocks children over head, hugs too tightly, "bear hugs."
Real approach to other children.
Intense crying. Cries because he can't verbalize his wishes, which are often for repetition of certain things (bib, spoon).
May stand rigid and frozen.
- 2 YEARS—Not characteristically aggressive.
May hit, pat, poke or bite other children.
Engages in tugs of war over materials.
"Messes up" the house but does not necessarily destroy things.
- 2½ YEARS—Tantrums: extremely aggressive whole-body response. Caused chiefly by mother.
Attacks other children aggressively with intent to hurt: bites, hits, kicks, especially in disputes over toys.
Very destructive with objects, especially with plaster and wall-paper.
"Grabs" objects from others. May without warning walk up to and hit a stranger.
Anger chiefly aroused by interference with his physical activity or with his possessions.
- 3 YEARS—Increased self-control and less aggression.
Increased use of language may take place of physical aggressiveness.
Anger now aroused less by interference with physical activity and more by interference with plans and possessions.
- 3½ YEARS—Verbal threats, such as "I'll cut you in pieces."
- 4 YEARS—Physically aggressive: bites, hits, kicks, throws.
Verbally aggressive: calls names, brags, boasts.
Rough and careless with toys.
May aggressively exclude others from group.

EMOTIONAL EXPRESSION

- 5 YEARS—Not characteristically aggressive.
May stamp feet, slam door. An occasional tantrum.
Verbal aggressiveness: "I'll kill you."
- 5½ YEARS—Transition from calmness of five to aggressiveness of six years.
Calls names: "Stinker," "You're a dope."
Verbal threats: "I'll hit you," "I'll shoot you."
Resists directions: "I won't," "Get out of here."
Temper tantrums. Slams doors. Strikes parents or other children.
Destructive in play.
- 6 YEARS—Extremely aggressive, both physically and verbally.
Tantrums: throws self to floor, hits, kicks. If sent to room, may not stay there unless door is locked. Then may destroy furniture.
Says, himself, that he is "mad."
Calls names.
Verbal threats: "I'll kill you."
Contradicts, argues, resists: "No, I won't"; "Try and make me."
Hits and kicks,—adults or playmates.
May exhibit considerable cruelty toward animals, insects, children.
Destructive with objects.
- 7 YEARS—Less aggressive behavior. Few tantrums and less resistance to mother's commands.
May be considerable fighting with siblings.
May threaten to "beat somebody up."
May kick or throw stones.
Verbal objection: "That isn't fair," "It's a gyp."
If angry may leave the room, or the playground.
- 8 YEARS—Contacts environment curiously rather than aggressively.
Responds to attack and criticism with hurt feelings rather than with aggression.
Aggression seldom physical, chiefly verbal. Argues, alibis, calls names or makes disagreeable remarks.
- 9 YEARS—Fighting and "beating somebody up" common (with boys) but may be in the nature of play.
Aggression chiefly verbal. Objects to what people say and do. Criticizes.
Verbally expresses indifference to adult commands or adult standards.

FEARS AND DREAMS

EMOTIONS are so ubiquitous and at the same time so fluid and elusive that it is difficult even to enumerate them. The dictionary is full of hundreds of adjectives and nouns which designate various emotional states; and there are countless emotional states in children and adults, for which there are no words in the dictionary. No wonder that psychologists cannot agree on a satisfactory classification of the emotions. But all listings give a leading position to fear.

One convenient classification recognizes six primary emotions: fear,

disgust, wonder, anger, subjection, elation and tenderness. The child manifests these emotions in various patterns of behavior: he seeks, he avoids; he desires, he rejects; he is inquisitive, aggressive, joyous, affectionate, fearsome.

The baby is born with a capacity to startle, to feel pain, to feel pleasure. This threefold capacity lies at the basis of emotion; because in all emotion there is an element of shock or excitement issuing in feelings of the agreeable or disagreeable. The startle pattern is very fundamental, very primitive. It is exhibited by adults as well as children (to say nothing of the lower animals). Eyes blink, head bends sharply, mouth opens, abdomen contracts, elbows, fingers and knees flex into a startled attitude. The organism thus assumes a preparatory postural set, and if in a moment it also feels distress or anticipates pain or danger, we call the reaction fear. At the same time the heart may begin to pound, blood pressure rises; the spleen releases red corpuscles, the liver releases glycogen into the blood stream. Many other physiological changes take place. The reaction may be mild and temporary; it may be violent and prolonged. It may result in cries of terror, in efforts of flight and escape; or it may assume a more chronic and refined form of timidity, anxiety and worry. Fear is protean. In yet other developments it contributes to the exalted sentiments of awe and reverence; and to the homespun virtues of caution and vigilance.

From the standpoint of child guidance, fear should not be too much feared. Fear is normal. Fearing is natural. Often it has a wholesome influence on the life of the growing child. Fear, like fire, is useful in the right place at the right time; harmful if misplaced and out of control.

The early fears of childhood change with age. These changes depend on the maturity of the child. Some of the fears seem entirely reasonable, and others which seem irrational may have a deep developmental justification. Possibly we should look for a rationale even in inexplicable night terrors and nightmares. Significantly enough they too diminish with increasing age.

The organism reacts with fear (or with fancies) whenever it senses

insecurity or the threat of insecurity. A baby hears a *door slam*; he startles, cries. Likewise, if he sees an abrupt movement or feels a sudden loss of support he cries. At 16 weeks he may cry time and time again, whenever he hears the *kitchen clock* strike. At 24 weeks he listens unafraid to the self-same clock; but he cries at the sight of an *approaching stranger*. At 32 weeks he is afraid of his own mother when she dons a *new hat*. Similar changes in the content of fears take place throughout the whole span of childhood. The child sheds old fears because experience teaches him true meanings. The child acquires new fears because he detects novelty and portent, which formerly he was too immature to apprehend. The new perceptiveness actually denotes a growth advance. Significantly the word *apprehension* means grasping with the intellect as well as distrusting with dread!

Our gradient of fears therefore shows a progressive trend toward increasing sophistication. An infant fears sinister sounds,—his father's deep voice, the roar of the vacuum cleaner. As a pre-school child he may fear the wrinkled visage of a withered old woman, or a Halloween mask. Later he is awed or even terrified by the ominous roll of thunder or the vague obscurity of attics and cellars. Still later he fears the burglar or spy who hides there; or who comes over the air in a too thrilling radio program. By the age of ten he can laugh retrospectively at these "childish" fears which he has outgrown. But his mental structure has probably been enriched and strengthened by some of these very fears. As he matures he does not banish fear altogether; he refines and organizes its patterns.

A further glance at our gradient reveals developmental fluctuations in types and degrees of fear susceptibility. During periods of relative equilibrium fears are not as prominent as at the ages when the organism is actively crossing frontiers into strange new territories. Susceptibility also changes in type: there is a trend of emphasis from *auditory* (2–2½ years) to *spatial*, to *visual* (3 years), to *auditory* (4–5½), to *personal* (7 years).

Even within any one type of fear, significant developmental changes

take place. For example, consider fears of sounds. At first the child fears especially loud or sudden sounds or those outside his natural range (1-6 months); then sounds of mechanical gadgets (18 months); sounds of trains, trucks, flushing of toilet, barking dogs (2-2½ years); fire engines (4 years); rain and thunder (5 years); doorbell, telephone, static, ugly voices, bird and insect noises (5½-6 years). A similarly elaborating development, based on the child's increasing perceptiveness, is apparent in his visual fears and fears about his mother.

All these trends are, of course, highly subject to individual differences in temperament, and environmental conditions and experiential association. Fears are notable for their individuality. (We know of a 3-year-old who had a highly organized fear of rubber boots; and another older child who was obsessed by the fear that our government could not pay its national debt!) When fears reach an overpowering intensity, or when they take the form of protracted anxiety, special aggravating factors must be looked for.

The basic variations in ordinary fears, however, are attributable to maturity factors. Growth processes determine in a broad way what and when a child will fear. They determine also the what and the when of his reveries, his imaginary companions, his day dreams, his night dreams, his nightmares. There are profound parallelisms and interactions between these various modes of behavior in normal child development. All afford a sidelight on the formation of personality.

For example, at about the age of two years the child begins to play imaginatively with objects. Month by month his dramatic phantasy elaborates, because his nervous system is a growing structure: a) he animates a material object, b) he plays the role of a baby, c) he plays with an imaginary object, d) he plays with an imaginary animal (30-42 months), e) he impersonates an animal, f) he has an imaginary human companion, g) he personalizes an object (36-48 months), h) he impersonates another person, i) he has an alter-ego type of imaginary companion (5-10 years).

The daydreams of the child reflect a similar sequence. And so do

his fears and night dreams, which show a trend from wild animals, to domestic animals, to separation from mother, to bogey man, to witches and ghosts, to burglars, and finally to personal and to private worries.

Vast areas of the child's dream world are never reported; but when he is old enough to report reliably, we find that while the content of his dreams is influenced by his personal experiences, the general format of the dreams has a deeper determination. In the deepest sequences we dimly see the impress of millions of years of racial evolution when the elemental fears of man took shape, in his struggle with nature, with beasts, and with his own kind. The last world war has added an awesome page to this ancient unrecorded history of human fears.

Far from being banished with civilization, fear remains an important factor in child behavior. It figures prominently in the dreams of infants and children. Fear dreams greatly outnumber anger dreams. Indeed we have found few purely aggressive dreams in the five to ten year age group. A typical dream is a fear dream in which the child is chased. He flees, he runs, he pedals his bicycle, he flies toward safety. Or he is paralyzed to the spot. But he does not fight to conquer. If his dream is blissful, it is not because he victoriously destroys or annihilates. It is rather because he enjoys a full release from the clutch of fear and revels in the free use of his dreamed activity. Many of his dreams are pleasant not because they fulfill a wish but because they activate an unimpeded power. Such dreams we would not rudely interrupt.

All of which suggests that in fears and dreams we are dealing with a natural function, which in moderation is harmless if not actually useful. Perhaps the dreams themselves may prove to be a natural device for organizing and resolving fears. Even the milder forms of nightmare may serve as a tensional outlet and facilitate a fuller development of ultimate inhibitory control. Conceivably a nightmare takes the place of more serious and more chronic somatic complaints. Or is a nightmare an acute, dramatic somatic complaint?

A night terror is a more extreme sleep experience than a nightmare. The child sits up in bed; or jumps out and clutches at the furniture or at a person. His face is terror stricken. He stares with wide open eyes but without recognizing his caretakers or surroundings. He cries; he hallucinates; he perspires. The episode may last for fifteen minutes. It terminates sharply. He returns to bed without memory or recall of the event. Peaceful sleep ensues immediately.

An ordinary nightmare is much less dramatic. The episode lasts only a minute or two. It is preceded by brief crying or moaning and body stirring. The child wakes up without perspiration; he recognizes his surroundings and is fully oriented to them. But there is often a long period of waking and a verbalized going over of the frightening dream before the child goes back to sleep. Peaceful sleep is delayed.

All these symptoms, whether of nightmare or night terror, indicate that we are dealing with a phenomenon more fundamental than either fear or dreams, namely, *sleep*. Contrary to popular belief, sleep is an extremely complex function, because it is inextricably bound up with the complicated mechanism of *waking*. Sleep is a component of an organic cycle which consists of four interacting phases: *a) going to sleep, b) staying asleep, c) waking, d) staying awake, a) going to sleep b) staying asleep . . . etc.* Now as shown in chapter 12 all these phases depend upon a coordinating neural mechanism which undergoes progressive organization throughout infancy and childhood. The child from five to ten is still "learning" to sleep. If he has recurrent nightmares, phase *b* (*staying asleep*) and phase *a* (*going back to sleep*) are out of normal adjustment. If he is subject to recurrent night terrors phase *b* (*staying asleep*) and phase *c* (*waking*) are faulty. He wakes with spastic, almost convulsive intensity and yet in such a narrow zone of his total personality that we may truly say "he doesn't know how to wake up." Fortunately he is likely to do so in time, with further developments of his complex nervous system.

Ordinary night dreams are milder, more comprehensive and better modulated despite their grotesqueness and despite the fact that the

super-lord cortex is sleeping on the job. We incline to the belief that the cortex is not entirely asleep, and that its lackadaisical participation is constructive and puts method in the apparent madness of the dream. This participation is at once a physiological and a developmental device. We need not worry too much about either the luxurious or the dreadful dreams of normal children.

But what about the daytime fears, when the cortex is wide awake? Here, the cortex of the adult must supply controls which the immature cortex of the fearing child lacks. Many childhood fears seem inconsequential and amusingly absurd. They should, however, always be taken seriously by the adult. They should never be laughed out of court. Nor should the child be shamed for cowardice. Valiant fathers, in particular, are likely to get too tough with their fledglings in the supposed interest of the nation's morale. "What, is this boy afraid of the water? Even with water wings? I'll toss him in and he will swim!"

We may well wonder whether the child's fear of water should not be respected. It is an ancient fear in the history of the race. The child may tremble at its impersonal vagueness, darkness and the vast expanse which spreads before him. At any rate, before the age of seven under certain conditions of temperament and experience, it may take a year or two before a young child overcomes his terrified screaming and his timorousness at the water's edge. The fear seems entirely irrational (to us). But we might well hesitate to cast it out altogether even if we could; because there should always remain a residue of controlled fear in the form of self-protective caution. We would not set up a completely fearless child as a paragon. Water is a danger as well as a delight.

The same philosophy applies to all forms of safety education. The everyday dangers of the home (falling, burning, scalding, injury from sharp and pointed objects, etc.) cannot be controlled by mere admonition. They call for concrete training and insight. The dangers of street and traffic likewise call for calm training in the art as well as attitude of caution. Caution also has a place in moral education. Children should

not be kept too innocent of evils which, after all, are comparable to physical dangers.

The preventive hygiene of fear, therefore, is many sided. A happy and secure home life is the best general safeguard against unreasonable fears. A sense of humor combined with sympathetic common sense helps to forestall the misgivings which lie at the root of exaggerated fears. Fatigue, also, may undermine fortitude. A warm bath and a glass of milk may help to banish an unaccountable fear.

Do not unnecessarily expose the child to manufactured fears. Keep him from movies, radio, comics and televisions which are absurdly terrifying. Good stories, however, provide fear experiences which enlarge the child's imagination. Literature, like life, introduces him to pain and evil and helps him in the task of surmounting both.

A final word about the dynamics of fear and the resolution of fear. To understand fear we must also understand anger. The preceding chapter dealt with aggression and anger reactions. Anger is in some respects the counterpart of fear. In fear the organism avoids; in anger it attacks a danger. The dilemma is fight or flight. Life calls for a working balance between these opposed tendencies. When they are not well coordinated the result is indecision, confusion or a conflict emotion like jealousy. Jealousy seems to be a subtle mixture of anger and fear.

Of the two opposing impulses fear is by far the more complex and the more fertile in its end results for human behavior. It is more subjective, more flexible and tentative, and therefore more consequential in the organization of personality. Certainly it needs more insight and subtle management on the part of parents and educators. The regulation of anger is by comparison simpler in scope. Anger leads to drastic, definitive responses,—some of them destructive and irreparable. Fear leads to withdrawal, and to avoidance responses, but withdrawal does not preclude a return to the scene of danger and a final resolution in terms of conquered and compensated fear.

What is the dynamics of fear in such instances of resolution? Let us assume that an angry dog barks at a timid child as though to devour

him. The child is so afraid of the sound and the sight that he runs away. Even on a better day he runs away at the mere sight and sound of a dog. During this period of withdrawal an injudicious parent forces the child to touch and pet a harmless dog. The withdrawal is thereby intensified. Left to himself and aided by more subtle reassurances, the once affrighted child begins to feel impelled by curiosity and tenderness. Inner forces reverse: he approaches the dog almost compulsively. Now he is actually drawn toward the dog. The intensity of this reversed behavior probably varies with the intensity of the original withdrawal behavior. If the latter was pronounced, the child may overdo his reconciliation. The child whose withdrawal was exacerbated by ill-timed interference is most likely to react with marked and prolonged compulsion. Whether the fear be normal or abnormal, its dynamic course tends to follow the same sequence: "shock"→withdrawal→compulsive return→and then, finally, resolution.

GROWTH GRADIENTS

§ 1. FEARS

- 1-12 MONTHS**—Loud or unexpected noise: squeaky toys, clock, father's deep voice, any sound outside the usual range.
 Strange objects, situations or persons.
 Familiar person who is in any way changed,—i.e. wearing a hat.
 Falling objects, dangers of falling, sudden movement.
 Threats of bodily harm or pain.
- 15 MONTHS**—Seeing mother depart.
- 18 MONTHS**—Sound of mechanical gadgets as electric sweeper.
 Seeing mother depart.
- 2 YEARS**—Many fears. Chiefly auditory as: trains and trucks, thunder, flushing of toilet.
 Visual fears: dark colors, large objects, large buildings, trains, hats, the dark.
 Spatial: toy moved from usual place, crib moved, moving to new house, fear of going down the drain.
 Personal: mother's departure and especially separation from her at bedtime.
 Rain and wind.
 Animals, especially animal noises.

FEARS AND DREAMS

- 2½ YEARS**—Many fears. Especially spatial: fear of movement, or of having objects moved from usual place, as a toy or piece of furniture.
Any different orientation: someone entering house in an unusual or unaccustomed way; taking a different route in a car.
Large objects, as trucks, approaching.
Many auditory fears as at two years.
- 3 YEARS**—Visual fears predominate: people of a different color, old wrinkled people, the grotesque, masks, bogey men.
The dark.
Animals.
Specific individuals described to the child as harmful, i.e. policemen.
Mother or father going out at night.
- 4 YEARS**—Auditory fears: especially of fire engines.
People of a different color, old people, bogey men.
The dark.
Animals.
Mother leaving, especially going out at night.
Uses word "afraid" or "scared" and then is afraid.
Enjoys being mildly frightened by the adult in play.
- 5 YEARS**—Not a fearful age.
Less fear of animals, bad people, bogey men.
Concrete down to earth fears: bodily harm, falling, dogs.
The dark.
Sounds: thunder, rain, siren, especially at night.
That mother will not return home, or be at home when he gets there.
- 5½ YEARS**—Very fearful. Especially auditory fears: doorbell, telephone, static, ugly voice tones, flushing of toilet, insect and bird noises.
Spatial: fear of being lost, fear of the woods.
The dark.
Fear of sleeping alone in a room or of being only one on a floor of the house.
Domestic animals.
Deprivation of mother: that she will not be at home when he gets home.
- 6 YEARS**—Marked increase in fears, especially auditory and spatial. May stem from one experience.
Fear of supernatural: ghosts and witches.
Large wild animals and large dogs.
Woods and tiny insects.
Elements: thunder, rain, wind, fire, especially sound of elements. May cover ears or comfort another.
Sound of sirens, static, telephone, flushing of toilet.
Fears that mother may die, or that something will happen to her.

DREAMS

Fear of man under bed, or hiding in woods (especially girls).
Injury to self: splinters, little cuts, blood, administration of nose drops.
Afraid of being late to school.

7 YEARS—Deeper, worrisome fears.

Many visual and spatial fears: shadows, ghosts and creatures in attic or cellar, heights.
War, spies, burglars, people hiding in closet or under bed.
Beginning to resolve fears by getting someone to precede him into feared place, or by using flash light.
Worries about not being liked by parents, teacher, playmates.
Fear of new situations: Starting second grade, new school work.
Worries about being late for school, or of not finishing school work.
Fears now stimulated by reading, radio and cinema.

8 YEARS—Fewer fears; less worrying.

May still have fear of fighting, of failure, of not being liked.
Less fear of elements and fewer visual and auditory fears.
Now shy of dark, but likes to be out at night with parents.
Girls may fear strange men.
Enjoy frightening others with "boo!" or by telling frightening tales.
Compulsively repeat fear situations to resolve them.
May worry in the midst of an experience: that he won't catch train, that he will be punished etc.

9 YEARS—Few fears, very variable from child to child.

Worry mostly about school failure. Some about trouble at home. Worry that they cannot meet demands of a competitive situation, about report cards. Upset by own mistakes.
Enjoy frightening each other: spying, hiding.
Spontaneously report that they were "frightened to death" of something. Seem to enjoy this and feel proud of it. Also say, "I don't frighten very easy."

§2. DREAMS

1 YEAR—Wake in night, cry, apparently in response to sound, usually a loud sound
There may be early sleep disquietudes.

2 YEARS—Wake up with the slightest sound. They may be dreaming.

3 YEARS—Children begin to report occasional dreams.
Dreams may wake the child.
Dream of parents, daily play.

3½ YEARS—Some wakefulness and crying caused by dreaming.
Only occasional reporting.

FEARS AND DREAMS

- 4 YEARS—Less wakefulness caused by dreams; more reporting, probably fairly reliable.
Reports of dreams may be confused with fanciful tales.
Dream of parents, playmates, play.
- 4½ YEARS—Considerable dreaming and can report dreams.
Dream of animals, especially of wolves.
- 5 YEARS—Nightmares which awaken and frighten child. Child often cannot tell dream.
Has difficulty going back to sleep.
Animals, especially wolves and bears chase the child.
Strange or bad people—may be of odd color or appearance.
Activity in regard to elements: fire, water.
Child may still confuse dreams and his own waking imagination.
A few dream of ordinary daily events.
- 5½ YEARS—Dream of things in their beds. Waken and go to mother's bed. Can usually tell dream. Less disturbed than earlier.
Wild animals (wolves, bears, foxes, snakes) chase or bite the child.
Domestic animals, especially dogs, hurt him or his dog.
Some pleasant dreams of everyday events.
Talking in sleep: "Mommy" or say names of siblings.
- 6 YEARS—Dreams are funny or ghostly; nice or bad; few nightmares.
Fewer animal dreams. Foxes, bears, lions or snakes chase, bite etc.
Domestic animals often in "nice" dreams.
Fire, thunder and lightning, and war.
Dream of ghosts, skeletons, angels.
Girls especially, of bad men trying to get into room.
Mother getting killed or injured, or that she has abandoned him.
Pleasant dreams of everyday people, sibs and playmates; may laugh and talk.
Can usually go to mother's bed if disturbed, and also usually able to tell what dream was about.
- 7 YEARS—Less dreaming; fewer unpleasant dreams; may be last nightmare age.
Some still dream of animals; of being chased or threatened and cannot move or speak.
Dreams mostly about himself. He is the central figure.
He flies, swims, dives into ocean, floats through air, walks above ground.
Daily events and often embarrassing situations.
Ghosts and supernatural; burglars and war.
Movies and radio affect dreams.
- 8 YEARS—Very little dreaming reported.
Varies from child to child. Some like to dream and to tell about dream.
Chiefly pleasant dreams about experiences, possessions, playmates. Some about personal difficulties or worries.

DREAMS

Some boys have returned to animal dreams or the fantastic.
May have frightening dreams from cinema, radio or reading.
Do not want to be wakened during dream.

9 YEARS—Many have horrid scary dreams of being hurt, shot, or kidnapped. Not only child himself, but his mother or friend may be the victim.

Motion dreams: whirling, swimming, flying.

Daily experiences and personal worries.

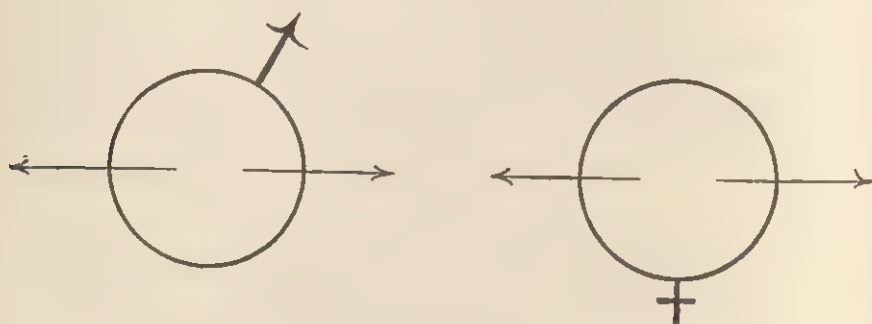
Dream of natural events (storms, fire) or of being chased or threatened.

Aware that dream is stimulated by radio or cinema.

Some like to dream, especially in early morning, and may want to go back to sleep to finish a dream. Like to tell dreams.

15

SELF AND SEX



WHEN asked to give the very shortest definition of life, Claude Bernard, a great physiologist, answered "Life is creation." A newborn baby is the consummate product of such creation. And he in turn is endowed with capacities for continuing creation. These capacities are expressed not only in the growth of his physique, but in the simultaneous growth of a psychological self. From the sheer standpoint of creation this psychological self must be regarded as his masterpiece. It will take a lifetime to finish, and in the first ten years he will need a great deal of help, but it will be his own product.

What is the self made of? And how is it made? Basically, of course, it is made of the attributes and potentialities which were inherited from the baby's ancestors. But a baby does not come into his inherit-

ance all at once, not even on his birthday. He comes into it gradually, over a long period of years through the impulses and organizing processes of growth. He has impulses to look, and listen, to touch and to explore the physical world. He has equally irrepressible impulses to explore the world of persons. Paradoxically, the development of his self depends upon the impact of other selves.

At first, he is so closely bound up with the milk that nourishes him, the bassinet that contains him, and with the internal sensations that suffuse him, that his embryonic self is virtually in a state of Nirvana. With the growth of the waking center of his brain (referred to in the earlier section on Sleep) he emerges out of this beatific absorption. He begins to take notice of the hands that minister to him, and a little later he stares intently at his own hands, as though he had made an important discovery. And so he has. Through sight, and active and passive touch, through ceaseless experimental contacts with the external physical world of things, he steadily builds up a fund of experience which becomes the core of his sense of bodily self-identity. It is a long process. We recently saw a bright but totally blind infant who, at the age of one year, was still in a state of confusion with respect to his relationship to his hands and to his feet. The seeing child has many advantages in arriving at a knowledge of his physical self. A looking glass is one advantage. Yet he will chase his own mirror image before he becomes wiser. And even as late as the age of three years, he cannot qualify for a hide-and-seek game, because, ostrich-like, he thinks he can conceal himself by simply covering his eyes with his hands! Picture him as he stands there, to the amusement of an older sib. His naivete in this interpersonal situation reveals the developmental complexity of the psychology of the self and its dependence upon social insight.

The social insight grows and patterns through a countless succession of interactions between the Baby and Some-One-Else. Nursery games illustrate the mechanism, and actually help the Baby to find himself. Peek-a-boo sets up an acute expectancy which is realized. *How-big-is-the-baby?* produces self-approval. *Give-it-to-me!* stimulates response to

some one else. *Rolling-a-ball* to and fro sets up reciprocity. The situations are simple but they reveal universal dynamisms of development which continue to operate throughout childhood and youth. Sometimes the dynamism accentuates the ego; sometimes it accentuates the social group or some member of the group. The accents vary with age, with individual temperament, and with the specific situation. A child may behave "socialized" in one situation, but reacts infantile in another because of a specific immaturity. These variations are extremely interesting (rather than irritating) to the perceptive parent.

The 15-month-old infant provides an example. He no longer plays the "Give-it-to-me" game as of yore. He intensifies his hold on the object, because he has a new sense of possession, which, by the way, is an important component of the sense of self. Conversely, he may even refuse to take a cracker from his mother's hand! He will only accept it if the cracker is proffered on a plate! Is he individualizing himself at the moment by accentuating his detachment from her? Many of his quirks of resistance and his assertive "me do it myself" are symptoms of reorganizations going on in the territory of his ever changing self.

He also has his moments and spells of accentuated dependence. These are not necessarily regressions to a lower level of behavior. He has to strike a balance between two opposite tendencies: attachment to apron strings and detachment therefrom. It is not surprising that occasionally he overstresses one of the bipolar trends. Development does not pursue a straight line course.

The adult offers his hand to a child. Note the fluctuating course of the resultant behavior patterns between the first and the tenth year. The 1-year-old accepts the adult hand as an aid to walking. At 18 months he spurns the hand but accepts a run-about harness. At 21 months he takes the initiative himself, comes to the adult and takes his hand and leads him to a point of interest. At two-and-a-half years he refuses or pulls away; at three years he accepts; at four he won't; at five he will. He also shakes hands on request. At six he is refractory or unready to shake hands; at seven he does so responsively, but not with ease. At

nine he shakes hands spontaneously. Not until ten is he certain to extend the right hand! Noting these variations which have their root in the motor as well as the social self of the child, adults need not be unduly sensitive nor insistent at failures to establish manual contact.

Language is a cultural tool which works in a reciprocal way. It helps, by communication to keep the social group together; it helps the individual to define his own status and to do his own thinking. Words are useful labels. They also are indicators to the observant parent. A child who over uses the pronoun *you* may be lagging in the concept *I*. At two-and-a-half years his speech may be imperious because he has difficult self problems to solve.

Many of his thinkings and feelings in regard to himself never come to utterance. He likes his name before he can speak it. He could scarcely realize himself if he didn't have a name. In the beginning was his name. He hears it so often that he finally identifies it with himself. Step by step he interprets other names and makes significant distinctions between pronouns in the first, second and third persons, and in nominative and accusative cases. The progress which he makes from the first to the tenth year might be summed up in a series of propositions which reflect his advancing insight:

1. "*Johnny*"—that's me.
2. I am I.
3. That's my mother.
4. That's my father.
5. He is a man.
6. I am a boy.
7. Susan is a girl.
8. She has a father and mother too.
9. I was a baby.
10. I grew.
11. I came from my mother.
12. I am going to get bigger.
13. I am going to school.
14. I am in the first grade. I have a mother and a teacher.
15. I am in the second grade. I hope my teacher likes me. I hope Freddie is not mad at me.
16. I am eight years old. I want to grow up.
17. I am ten years old. I read the magazine. I want to be an engineer when I'm a man, like my father.

In rough outline these statements show how the self expands, differentiates and incorporates new dimensions into its structure. The first differentiations have to do with the *me* and the *not me*. But very early the child has to reckon also with the distinctions of sex; at the age

of two he distinguishes boys from girls by clothes, hats, and style of haircut. Soon he detects more fundamental physical differences. All this helps him to understand what he himself is. His early interests in sex are by no means purely sexual; they are part of a wide ranging curiosity which comprehends his whole environment. He cannot get his bearings unless he makes certain elementary observations and inferences, concerning mommies and daddies, boys and girls, animals and persons, men and women.

Of great psychological significance is his gradual realization that he has an *historical* self as well as a *present* self. *He* was once a *baby*! A little recapture of that babyhood by questioning, or even by dramatic revival helps to impart a new dimension to his enlarging self. At four or six his interest expands into the family tree from which he himself stemmed, and so he inquires about his relationships to parents, grandparents and great-grandparents. A 7-year-old observing his newborn brother taking a first meal at the breast, asked with astonishment, "Did I do that? And Mommy, did you do that too; and you too, Daddy?" He was in the throes of assimilating a tremendous fact. His questions reveal how closely the development of the self is intermeshed with the phenomenon of sex.

This does not mean that the whole, far ramifying structure of the self is built about a single framework of sex. The processes of generation and growth, to be sure, are so all important for the perpetuation of the species that they are strongly entrenched in the organism. But sexual functions do not necessarily play a despotic role in the patterning of child development. Instead the vast array of realities and attitudes which directly or indirectly pertain to sex must be assimilated into a yet more intricate complex, namely, the growing self. The problems of sexual hygiene cannot be rationally approached unless we see the facts of sex in perspective and recognize the subtle gradations by which they are incorporated into the total development of the individual self.

"Are you a little boy or a little girl?" This is a question which

Binet made famous. One addresses it to a child about the age of three years. Usually he (the boy!) responds correctly. But even at this age many children reply by giving their own names. Others respond in terms of an emphatic negative, "Not a girl!" (Does this vehement denial reflect the traditional jest indulged in by relatives who tease small children by attributing the wrong sex to them?) A bright child may counter with a jokingly incorrect response. An older child may indignantly deny the implication of the wording of the question with "No, I am a *big* boy!" Girls are a little more likely to reply "I'm a boy!" Whether this latter is a masculine protest, we do not know! But the variations and tenor of all these responses show how diversely self and sex are interrelated.

Having made a correct intellectual discrimination as to sex, it will still take years for the child to define and establish his proper role as a boy or a girl. Nothing follows automatically. Some writers even hold that it is the culture which impresses this role. Our own studies indicate that there are differences in temperamental predisposition, in psycho-motor demeanor, and in developmental timing which are intrinsic in nature. The differences may not be great, but they can be decisive and they cast doubt on any hypothesis which derives the sex differences in personality solely from environmental or cultural factors.

But the psychological differences between the two sexes are by no means simple. In children as well as in adults they vary enormously in kind and degree. By means of an elaborate masculinity-femininity test consisting of no less than 456 items Terman and Miles investigated the sex temperaments of groups of adolescents and adults, and found many statistically distinctive sex responses. To what extent the manifold differences are due to a cultural bias the statistics do not disclose. The bias itself must have been originally produced by innate differences in the sexes. In any event, the end result is that each sex tends to play the role assigned to it.

The child, however, must actively find and adapt himself to the role,

which again is not a simple matter, because each individual of each sex has a distinctive equipment of innumerable qualities of maleness and femaleness. These qualities manifest themselves in behavior tendencies, which to some extent compete with each other, at least in the eyes of the culture. The 2-year-old begins to identify his own sex by making elementary distinctions based on dress, haircut, and possibly voice. A few months later he becomes interested in the differences between boys and girls in their mode of micturition. Still later each sex may imitate the other in an effort to understand this difference, and a great many other differences. Many of these imitations are simple dramatic projections, even when they happen to include the genitalia.

A young child when confronted by two rival alternatives, tends to try out both when he is relatively unfamiliar with the behavior in question. And so during the formative pre-school years, before the so-called sex role is well established, the child shifts rather readily from one sex role to another. Our guidance nursery staff is frequently amused to see how often the domestic corner of the nursery is occupied by the dominant males, age two-and-a-half to three years. This corner is equipped with nothing but dolls, beds, brooms, ironing board and general house-keeping facilities; and it is the boys who are doing the house-keeping, including laundry.

Four- and 5-year-old children often play the role of the opposite sex. Many a 4-year-old boy has asked for a doll for Christmas; and the 5-year-old often wants a doll house. The 4-year-old may know he is not orthodox; so he keeps his doll somewhat out of sight. He may also be conscious of the excessive cultural pressure exerted by the disapproval of his parents. (It is easy to overstress the virtues of masculinity and gallantry at this age.) Girls from five to six years old may want to wear boys' clothes and tuck in their hair. By the age of seven, the shifting in roles becomes less frequent. The assigned sex role is usually established, a little earlier in girls, who at about this time are likely to object to having their hair cut. This too is the time when girls in particular may manifest an intense desire to simply hold a baby, and to

have a baby in the family. Which reminds us again that the area of sex-interests is wide and growing. It is not limited to the so called sex act; but relates to the whole complex network of interpersonal relations, and especially those of family life.

The problem of the parents is to help the child, be it boy or girl, to find his or her role in this broader family setting,—a role which is progressing toward marriage. The child needs guidance all along the way. Parents sometimes think they will wait until the child can understand, and then they will tell him the whole story! And that will be that! But it is never so simple and decisive. Something unexpected is likely to occur; and fortunately it often is much less serious than it appears to be at first blush. To be forearmed the parent should know in advance the sort of things which do happen at least to other children. The growth gradients and maturity traits deal with the concrete situations.

Even before the age of four, questions about marriage begin. The 4-year-old may ask questions about how a specific baby arrived into the family. He may not accept too factual information. He may think the baby is really born through the navel. Or he may prefer to think the baby was purchased. At five years his curiosity is less intense than at six years. At six his questions become more specific, and may show some interest in the mechanics of mating in animals. At seven these interests are less openly expressed; but the child reflects and muses on sex relationships as he does about many other aspects of life. If he has heard about "seeds" he thinks about one or two seeds. At eight his interest in the father's function in procreation becomes more realistic. He is more aware of the marital relationships of his mother and father; and perhaps more susceptible to a jealousy reaction. At nine and ten he naturally feels a deepening identification with his family. He displays it, paradoxically, by withdrawal tendencies, and by a heightened sense of shame at any shortcomings on the part of the household. *He is now tragically sensitive to disharmonies and antagonisms between his mother and father.* And this may have a more devastating effect upon the

development of his personality than some minor and unintelligent sex episode on his part.

The period from five to ten years is not a dormant or a latent sexual period. It is a period of progressive organization. Unremitting elaborations of the self and sex attitudes are laying the foundation for the more acute developments of puberty. The guidance during this pre-critical period should consist in progressive orientation. Information must be skillfully imparted and also skillfully withheld; because it should be graduated to suit the occasion and the child's maturity. The same story needs to be told and retold in changing versions. Some facts should be given in advance as a buffer against misinformation. The chief goal, however, should be to preserve easy, mutual confidence between mother and child, father and child (sometimes the latter relationship is the more vital). If sex exploration or an adventure in nudity is reported or discovered, the parent should so far as possible rationalize it calmly in her own mind as well as in that of the child. Orientation, rather than mere instruction or discipline is the key to a solution. Often the supreme psychological moment for effective "sex" guidance arises when there is no sex problem at all. The child is taught by suggestion and by indirection. The two extremes to be avoided are over protection through silence and evasion; and over reliance on excessively candid information. The reticences and the securities of wholesome family life are the best long range guarantee of a normal development of self and sex. Reticence as well as information has a role in sex education.

There are enormous individual differences with respect to the strength of sexual characteristics among adults as well as children. Sheldon, for example, states that the viscerotonic temperament is "notably greedy for routine outward affection by members of his family." The attitude of parents will naturally color their outlook on the problems presented by the child. Misdirected emotion can be avoided only if the parent carefully interprets the individuality and developmental background of the child, as each problem arises. Intelligent, outgoing, factual children want and comprehend many facts

early. Other children are so slow or naive that they must be told a little at a time, with much repetition, and sometimes even a little skillful prodding. Some children again assimilate best by making their own deductions from a realistic knowledge of reproduction in animals. Sometimes the father is a better channel of information than is the mother.

A few children of both sexes seem blind to the implications of sex until a relatively advanced age. Boys are more likely to get sex "information" from non-parental sources. They are more active and persistent in experimental play and exploration. They bring home tales they have heard, new "bad" words they have learned. They ask for specific explanations; and parents can be of service in helping the boy to a suitable vocabulary. Comparing boys and girls as groups, girls tend to show a more precocious interest in sex than boys. Their questions are more comprehensive, and less dependent upon the stimulus of information picked up from other children. The questions seem to come from a more integrated curiosity.

It is evident, then, that the acquisition of a mature sense of self is an extremely intricate process in which the sphere of sex figures importantly, but not omnipotently. The younger the child the less developed the self, even though the vigor of self-assertion may be strong. With increasing age and social experience this self becomes less shallow; it grows in depth; it consolidates the past; it orients to the future. The child's awareness of his self expands with deepening awareness of others. At the age of two he takes an extra spoonful of gruel for Jackie, and another for Jane. Gradually he acquires a sense of hierarchy. He senses his seniority over his baby sister; but, he tends to defer to an older boy. At six years he has been known to say, "I hope they won't ask me to do baby things in school." By the age of ten he is so aware of standards that he is capable of hero worship. He begins to use the word *person* in a new way. The word is coming to represent a new concept, a new relationship to himself and to others. He may even ask, "Am I the type of person who could or, who would ?" An inarticulate child does not formulate the question; but

he virtually asks it in numerous ways as he confronts the situations of his life. His increasing interest in the far-off future indicates that an irrepressible impulse to grow up is part of his irrepressible self.

GROWTH GRADIENTS

§ 1. SELF

- 8 WEEKS—Social smile at sight of another person's face.
- 12 WEEKS—Regards own hand; vocal social response.
Knows mother and recognizes her; enjoys evening play with father.
- 16 WEEKS—Fingers own fingers; spontaneous social smile.
- 20 WEEKS—Smiles at mirror image; cries when someone leaves him.
- 24 WEEKS—Smiles and vocalizes at mirror image; pats mirror and regards hand in contact; discriminates strangers.
- 28 WEEKS—Grasps feet.
Fingers mirror, regarding imaged fingers.
- 32 WEEKS—Withdraws from strangers.
In mirror, regards image of parts of body which are not in contact with mirror.
- 36 WEEKS—Responds to own name.
Regards hand as it moves along surface of mirror.
- 40 WEEKS—Waves bye-bye and pat-a-cakes.
Regards reflected movement of hand in mirror.
- 44 WEEKS—Extends object to person without release; again withdraws from strangers
Placed before mirror, sits back and regards total image.
- 52 WEEKS—Gives object to another on request.
- 18 MONTHS—Hugs and shows affection toward doll or teddy bear.
- 21 MONTHS—Calls all other children "Baby."
- 2 YEARS—Can call himself by his own name.
Calls all men and women "Daddy" and "Mommy."
Feeds and toilets doll or teddy.
Says "I want" (27 months).

2½ YEARS—Calls self "I" and has an increasing sense of "I" especially in relation to immediate abilities.

Defines his sense of "I" by his imperiousness.

Calls other people "You."

A few, who have a slowly developing awareness of self, confuse "I" and "You."

Calls women "Lady" and men "Man," as distinguished from mommy and daddy.

Knows that he is a boy, like father and that he is different from girls and mothers (and vice versa).

Says "I need," and "I don't like."

Domestic play with doll or teddy; or plays with imaginary animal.

Relives babyhood verbally. May want to be a baby. May play role of baby (33 months).

YEARS—Sense of "I" becoming stronger.

Combines self with another in use of "We."

Says "I like."

Can tell difference between boys and girls but makes no distinction in his play.

Plays the role of an animal; or may play with an imaginary animal or imaginary human playmate.

Still appears to assume that others see the world as he does.

3½ YEARS—Beginning of temporary attachments to some one playmate, often of opposite sex. Girls more often the initiators of these attachments.

Interest in marriage and marrying. Proposes to parents and others.

Says "I love."

Interchange of parent-child role.

Plays the role of animals or of other people.

Plays with imaginary animal or imaginary human playmate.

4 YEARS—Expanding sense of self indicated by bragging, boasting and out of bounds behavior.

Tendency in play groups for a division along sex lines.

Beginning of strong feeling for and boasting about family and home.

Exhibits some self-criticism.

Begins to realize that other children are separate entities, like him in some ways but different in some ways. That they too have mothers and fathers, and thoughts and feelings of their own.

Is interested in growing older.

5 YEARS—Rather impersonal age. Self and others taken for granted.

Not as interested in own name or in names of others. "I am five" may be more important than "I am Johnnie."

Close and secure relationship with mother (or another adult); even blames mother for what he does. Mother center of the child's universe.

Believes that he and mother are "eternal." Likes to hear of mother's babyhood.

SELF AND SEX

Self-contained, serious about himself, impressed with ability to imitate grownup behavior.

Needs, invites and accepts some supervision. Likes to ask permission and to help. Likes to have things go smoothly.

Interest in immediate experiences. Realistic. Undertakes only what he can do.

6 YEARS—Child is center of his own universe. Is expansive, indiscriminating.

Interest in own babyhood, stories pertaining to himself, anything pertaining to himself. May act like a baby.

Conceives of himself as always living, past and future.

He knows everything, wants everything, wants to do everything his own way.

Possessive of belongings and likes to display them.

His name is important to him. Likes to be called by own name and to write name on all his products.

Relationship with mother most difficult. May behave worst with her. Resists with "No I won't;" acts like a baby, is rude and argumentative. Also fears that she may die, or may not be at home when he returns.

Mother describes him as "changed for the worse."

Does not know when to ask for assistance. May not accept help when he needs it. Is domineering, stubborn, aggressive.

Wants and needs to be first, to be loved best, to be praised, to win.

Does not know what to do but resists direction of others; accepts direction only when it coincides with his idea of what he is doing.

Emotionally excitable, defiant.

Physically and verbally aggressive; belligerent and resistant when attacked.

Interest in good and bad behavior in himself and playmates.

7 YEARS—More aware of and withdrawn into himself. Absorbs impressions from what he sees, hears and does. Seems to be in "another world." May not hear commands.

Self-conscious about own body. Sensitive about exposing body. Does not like to be touched. Modest about toileting.

A definite minor strain: believes that others are mean and unfair.

Ashamed of fears, mistakes, or to be seen crying.

Protects himself by withdrawal. Spends more time alone. May be unwilling to expose knowledge for fear of being laughed at or criticized; or suddenly responds and withdraws. Leaves a scene when things are going badly.

Fear of losing own identity. May dislike new clothes, having hair cut. Begins to suspect that he will one day die. Denies this.

May believe that he is adopted, does not belong to his family.

Loses or hoards products. Forgets to put name on them.

His world is broadening and he is trying to place himself in the social and physical world.

Worries that his mother, teacher or playmates do not like him.

Wants his own place in family group and in school group. Wants his own place at table, in a car; wants his own desk, his own room.

Cautious in approach to anything new.

Less responsive to mother's demands. May say "Why should I?", "I don't feel like it."

Wants responsibility, especially at school, but concerned that he may not do well. Slight skepticism about religion and Santa Claus.

Yenses a goal but has little evaluation of it. Wants to complete a task if he starts it, but does not judge his capacity to do so. Apt to expect too much of himself.

8 YEARS—More outgoing, contacting people and places. Cannot stay out of contact with any part of environment. Seems to be trying his "self" against the environment. Conscious of himself as a person, and recognizes some of his differences from others and voices them. Talks more freely about himself. Thinks about his "self."

Interested in his own inner anatomy.

Personality more expressive. Facial expressions and gestures are "like him."

Dramatizes. May seem to consider himself the center of the stage.

Belittles himself, expecting praise.

Wants adult to be a part of his world. Makes many demands of mother and wants her to act in certain ways.

Chief interest in relationships with others—children and adults.

Resents being treated as a child. Wants to be like adult. Begins to recognize that adult may know more than he does. Can't wait to grow up.

Can make up mind easily and can respond to reason. May respond with, "Oh all right, if you insist" if instruction is given in a way that suits him.

May have sudden shower of tears at "undeserved" criticism.

Give and take with another person needs to be in balance.

Tries to live up to standards of others. May feel guilty if he thinks he doesn't.

Concerned not only by what others do to him but what they do to others as well.

Expanding information and experience lead to knowledge that standards differ.

Increasing identification with social, political groups and exclusion of those who are different.

Increased interest in distant and long-ago people and places.

9 YEARS—A "change for the better" at nine. Many earlier tangles smooth out. Less tension. Life simpler. Child more independent, self-sufficient, dependable, trustworthy. Frequent spurts of better behavior.

More responsible: can have key and let self into house, get a meal, go downtown, make simple purchases, phone if going to be late.

Very busy with own concerns. Doesn't have time for routines or parents' demands. Many are becoming "workers" and may prefer work to play.

Active and interested in many things: school work, succeeding at any task, the future, history, mechanical things, electricity, making things.

Much planning, in great and practical detail: for the immediate future or about going to college and what he will do when he grows up. Making of lists.

"Don't care" attitude, bold front; at other times anxious to please, wants to be liked. Loves to be chosen.

SELF AND SEX

Increasingly self-conscious: about own activities, own body, own home, parents' and siblings' behavior.

Self-criticism: "I would do that," "Oh that's my poor memory." May be over-ambitious in demands of himself.

May be apprehensive about work and health.

Short-lived but innumerable complaints about many aspects of life.

Wants to succeed. Will work for a reward.

Sensitive and embarrassed by correction.

Some self-projection in beginning of crushes on others, or hero worship for others.

Child now oriented more toward his contemporaries than toward his parents. May experience some conflict between adult code and the code of his contemporaries.

Beginning of marked individual differences from child to child in all fields.

Child's own individuality and personality making itself clearly apparent.

§ 2. SEX

18 MONTHS—*Sex interest and differentiation* Affectionate towards mother when tired, in trouble or when pants are wet.

Uses general term "baby" for both boys and girls.

2 YEARS—*Sex Interest and Differentiation* Shows strong affection toward parents: "My mommy," "My daddy." Kisses at bedtime.

Names genitals by word used for urination.

Distinguishes boys from girls by clothes and style of haircut.

Differentiates adults by general words, "lady" or "man," but continues to call children by specific names: "Jacky" or "Mary."

Babies Interest in the appurtenances of baby sibling: powder, soap, clothes, crib.

2½ YEARS—*Sex Interest and Differentiation* Conscious of own sex organs and may handle them when undressed.

Inquires about mother's breasts.

Knows that he is a boy like father and different from girls and mothers (and vice versa).

Non-verbalized generalization that boys and fathers have distinctive genitalia, and stand when they urinate; girls and mothers do not.

Shows interest in different postures of boys and girls when urinating.

Differentiates sex of children by general term "boy" and "girl."

If questioned about his sex, negates opposite sex, "I'm not a girl."

Beginning of interest in physiological differences between sexes.

Boys may prefer girls toys.

3 YEARS—*Sex Interest and Differentiation* Expresses affection by "I like" (3½ years—"I love").

Affirms own sex if questioned—"I am a boy."

Verbally expresses interest in physiological differences between sexes and in different posture for urinating. Girls attempt to urinate standing up.

Desire to look at or touch adults, especially mother's breasts.

Interest in marriage and marrying; proposes to either parent and others; thinks you can marry either sex.

No distinction between sexes in play.

Temporary and shifting attachment to some "friend" of the opposite sex (3½ years).

Babies Beginning of interest in babies, wants family to have one.

Asks questions: "What can the baby do when it comes?", "Where does it come from?"

Most do not understand mother when she answers that the baby grows inside of her.

4 YEARS—*Sex Interest and Differentiation* Extremely conscious of the navel.

Under social stress grasps genitals and may need to urinate.

May play the game of "show"; verbal play about eliminating and calling names relating to function.

Interest in other people's bathrooms; may demand privacy for himself, but extremely interested in bathroom activities of others.

Some segregation along sex lines.

Babies Questions about where babies come from. May believe mother's answer that the baby grows inside of the mother's "tummy," but may cling to the notion that the baby is purchased.

Questions about how the baby gets out of the mother's "tummy." May spontaneously think the baby is born through the navel.

5 YEARS—*Sex Interest and Differentiation* Familiar with, but not much interested in physical differences between the sexes.

Decrease in sex play and game of "show."

More modest and less exposing of themselves.

Less bathroom play, less interest in strange bathrooms than earlier.

Aware of sex organs when adult seen undressed and may wonder why father doesn't have breasts or sister a penis.

Boy may reject girls' toys such as dolls, although he may make a doll's bed in carpentry, or take part in house play.

Takes opposite sex largely for granted, little distinction between sexes in play.

Frequent boy-girl pairs.

Babies Interest in baby and in having a baby of their own; may dramatize this.

Some boys as well as girls may relate back to when they were in mother's stomach, or to future when they will have a baby of their own.

Re-asks, "Where do babies come from?" and accepts "mother's stomach" as an answer.

Some cling to the idea that you buy the baby at a hospital.

Make little connection between size of pregnant woman and presence of a baby.

6 YEARS—*Sex Interest and Differentiation* Marked awareness of and interest in differences in body structure between sexes. Questioning.

SELF AND SEX

Mutual investigation by both sexes reveals practical answers to questions about sex differences.

Mild sex play or exhibitionism in play or in school toilets. Game of "show."

Some children are subjected to sex play by older children.

May play hospital and take rectal temperatures.

Calling names, remarking or giggling involving words dealing with elimination functions.

Some confusion in differentiation of male and female. May dress in attire of opposite sex.

Interest in marriage to someone of opposite sex, often to a relative.

Strong interest of older boy for younger girl.

Babies Interest in origin of babies, pregnancy and birth.

Vague idea that babies follow marriage.

Interest in how baby comes out of mother and if it hurts.

Some interest in knowing how baby started. Accepts idea that baby grows in mother's stomach and started from a seed.

If told of intercourse by older playmates, child may be disturbed and usually questions mother.

Wants a new baby in the family.

Wants to hold baby after it is born.

7 YEARS—Sex Interest and Differentiation The child has long since satisfied interest in differences in physique between the sexes. Less interest in sex.

Some mutual exploration, experimentation and sex play, but less than earlier.

Interest in sex role and characteristics of boys and girls.

May be last age when boys and girls play together regardless of sex lines.

Strong and persistent boy-girl love affairs with the idea of marriage usually strong.

Babies Intense longing for a new baby in family usually of own sex.

Knows that having babies can be repeated and that older women do not have them.

Interested in mother's pregnancy. Excited about baby's growth. Wants to know how it is fed, how big it is, how much it costs.

Interest in literature, such as *The Story of a Baby*, by Marie Ets.

Associates size of pregnant woman with presence of baby.

Satisfied to know that baby came from two seeds (or eggs), one from mother and one from father.

May ask details of birth. Just where mother will be, how baby will get out.

8 YEARS—Sex Interest and Differentiation Interest in sex rather high, though sex exploration and play less common than at six. Girls may be unusually responsive to touch and rough play with boys.

Interest in peeping, smutty jokes, provocative giggling; whisper, write or spell "elimination" and "sex" words.

Girls begin to question about menstruation.

Boys recognize pretty girls and girls, handsome boys.

A boy may have several girls but he knows he is going to marry only one of them. But fewer boy-girl twosomes.

Plan to have own home when married.

Sexes begin spontaneously to draw apart in play.

Babies Warm and loving interest in babies.

Understands slow process of growth of baby within mother; connects appearance of pregnant woman with a baby.

Wants more exact information as to where baby is in mother's abdomen. Confused by use of word "stomach."

Some girls may ask about father's part in procreation.

9 YEARS—*Sex Interest and Differentiation* May talk about sex information with friends of same sex.

Interest in details of own organs and function; seeks pictorial information in books.

May be self-conscious of exposing body.

May not wish parent of opposite sex to see him nude.

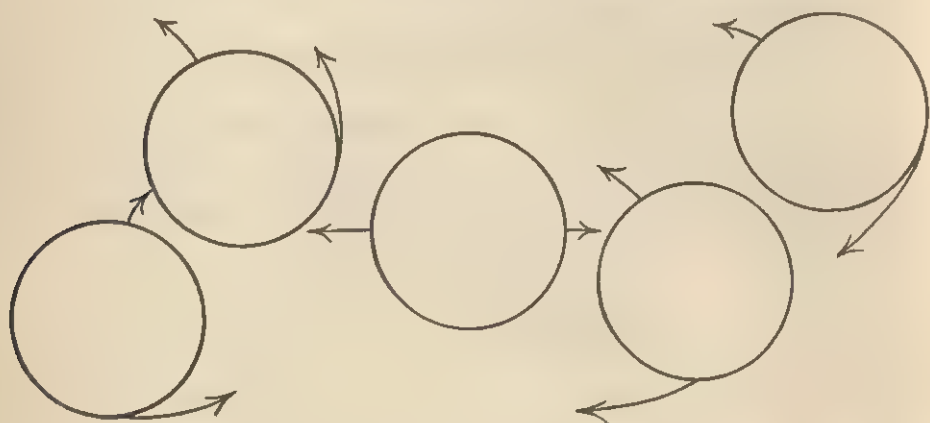
Sex swearing; sex poems.

Division of sexes in play; if mixed, may stimulate kissing games; teasing about "girl" or "boy" friends.

Babies May relate selves to process of reproduction, "Have I a seed in me?"

Some NINES may still think that baby is born by Caesarian section.

INTERPERSONAL RELATIONS



THE roots of the growth of a child's personality reach into other personalities. The detailed make-up of his personality depends upon the interpersonal relationships which he experiences from day to day, from age to age. If he did not come into contact with other human beings from the moment of birth, he could scarcely acquire a distinctive personality recognizable either to himself or to others.

His personal self, however, as shown in the previous chapter, is subject to the laws of growth. These laws place limitations on the *kinds* of contacts and the *depth* and *scope* of the contacts which he can make

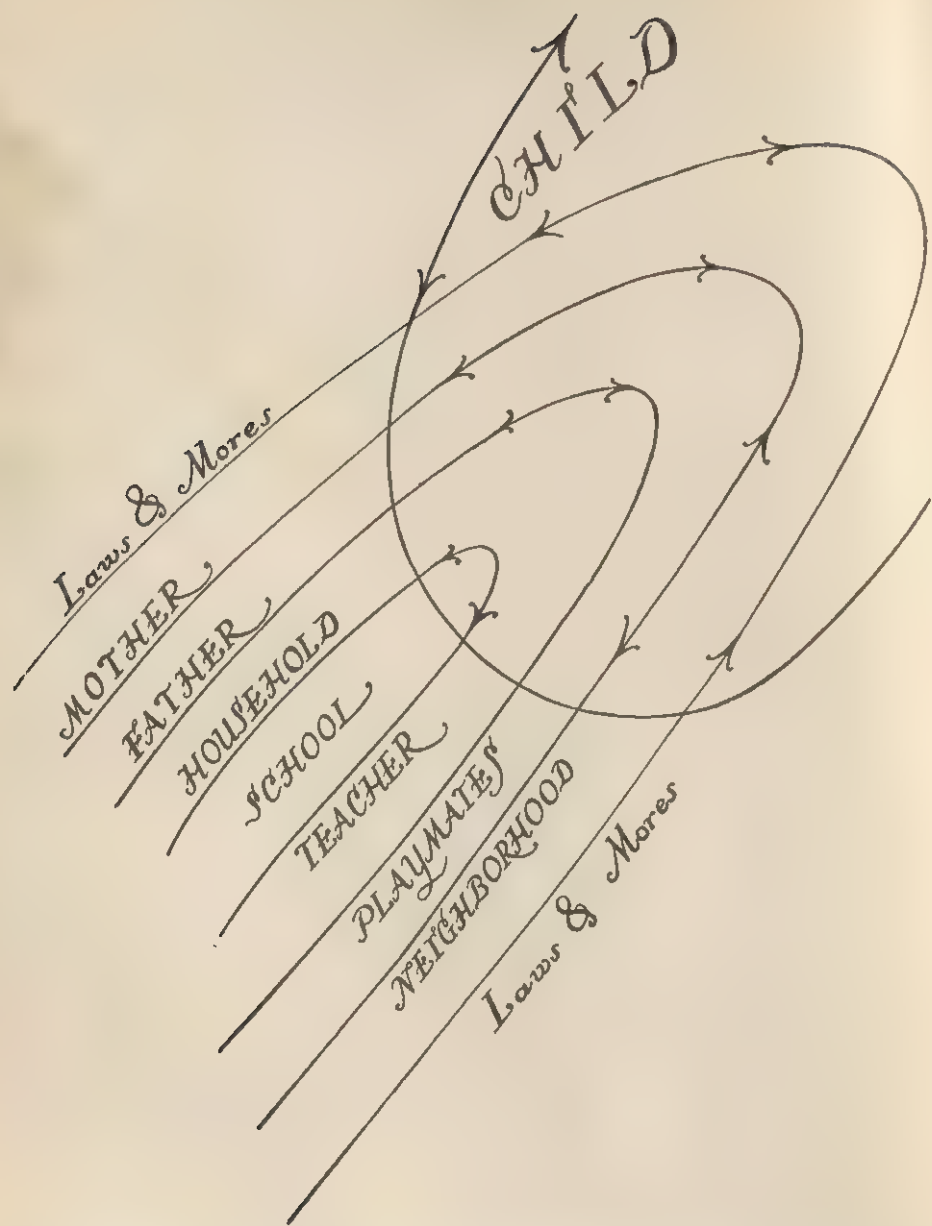
with other persons, young or old. Even a cursory reading of the growth gradients at the end of this chapter will demonstrate the presence of maturity factors and the resulting involvedness of the "anatomy" of the child's personality.

We need not fear the connotations of the word "anatomy," because the child's personality assuredly is a living structure, made up of attitudes, predispositions and potentialities. His personality is not a pure essence which in some obscure way absorbs the influences of abstract good and evil. It is a patterned and a patterning fabric which takes form and gives form within countless interpersonal relationships.

These relationships are so diversified that it will be useful to draw a map indicating their field of operation. The accompanying chart is, of course, highly diagrammatic. It represents the child in the midst of interpersonal forces which impinge upon him at home, at school and in the community.

HOME includes father, mother, grandparents, sibs, kin, visitors and guests (young and old). SCHOOL includes teachers, classmates, principal, janitor, supervisors, playmates and pupils from the various grades. COMMUNITY includes a host of persons and institutions, regularly or occasionally encountered on street, road and byways: in shops, at church or theatre, in clubroom, park and public places. The community includes also the intangible and yet personal forces which are embodied in laws, manners and customs, the local mores and the prevailing attitudes toward racial and minority groups.

Our schematic map pictures the child in a kind of electronic vortex symbolized by lines and arrows! These electronic arrows fly shuttle-like to emphasize that the interpersonal relation between the child and all his associates is truly a two-way interaction. Other persons react upon the child; but the child also reacts upon the other persons. The gradients which follow show the growth trends of these interactions. The diagram indicates that the child's personal world is a kind of web which he himself has helped to weave. Just as in Nature the circle of one creature's life cuts into the circles of many other



SCHEMATIC MAP OF INTERPERSONAL RELATIONS

creatures, so in the psychological development of a child we glimpse the strands of a "web of life,"—a ceaseless process of adaptation to other individuals which registers itself in the tissue of the child's personality. Even the tensions and the maladjustments between parent and child are efforts at mutual adaptation. A knowledge of the ways of growth makes for improved adaptations. Anatomically regarded the child's personality consists of an indescribably intricate web of interpersonal relationships.

The detailed gradients of these relationships show how unprofitable it is to consider the social nature of the child in generalized terms. His social characteristics consist of concrete tendencies and orientations; far from remaining static these orientations are constantly changing. In a general way we may say that he loves his parents and likes his teacher; but this does not tell us much about the actual pattern or trend of his relationships. Sometimes his affection fastens more strongly on his mother, sometimes on the father. It is not a fixed quantity and parents should not expect an unvarying level of attachment. Each parent may anticipate temporary periods when the child shows relative indifference.

HOME

At the age of two years the child may actually be overtaxed when both parents are present at the same time; he can adjust to each one individually, but not to both simultaneously. At later ages he has comparable difficulties in apportioning his affection evenly. Parents will find it wise to shift their roles from time to time. When necessary they may even permit unilateral confidences, if the child so demands. At the ages of six and eight, children are rather deeply embroiled with their mothers. The 8-year-old is often so deeply sensitive toward his mother that he betrays impatience if she deviates even a moment from the consuming demands he makes upon her. This intensity can show itself in qualms of jealousy when mother and father are together. At the age of six the same child may have expressed both deep affection and contradictory hate. At seven his relations, though still variable, tended to be

more smooth and companionable. At six he probably feared and admired his father more than his mother. At nine the father-child bonds strengthen, particularly if the father is companionable and respects the child's increased maturity. The child has reached the age when he is beginning to evaluate (intellectually and morally) his parents' actions and standards of conduct.

It is idle, of course, to exact affection, or to stipulate its occasions. Parents and their children must grow up together, and work out their several compatibilities in terms of temperament and maturity. Parents are likely to overlook the maturity factors and to be unduly sensitive in regard to the unforeseen fluctuations in the child's attitudes. Many of these fluctuations have a natural developmental basis. One need not worry. When the child himself reaches maturity his fundamental regard for his parents will prove to be the summation of an overall trend of development throughout a long stretch of years.

During the years from five to ten the parent-child relationship demands a high degree of flexibility. If there is more than one child in the family the principle of impartiality should not be applied too artificially. Each relationship is unique, and parents need not treat all children alike. With varying accent a child may display several stages of response: dependence, demandingness, indifference, worship and companionship. Comparable developmental variations reveal themselves in the relationships between siblings, even when every effort is made to avoid envy and jealousy. Oftentimes the frictions are temporary; many could be avoided if the household permitted the children to spend more time apart. The amicability span, like the attention span, tends to be shorter for younger children.

The family unit is a complex institution.* It needs more planning and deliberate self-appraisal than it ordinarily receives. This is particularly true when the household has to reckon not only with children,

* This is reflected in the increasing emphasis placed on the family as the basic unit in social welfare. *The National Conference on Family Relations* has been organized in recent years (Chicago) to serve as a clearing house for informed and advanced thinking on marriage and family living.

but with uncles, aunts, grandmothers and grandfathers. Inasmuch as we cannot cover the whole gamut of these complications, let us venture a few comments concerning grandparents!

The recording angel alone can do justice to the many practical services and to the words of counsel which an understanding grandmother supplies in a busy household. Her presence and contacts greatly enrich the experiences of her growing grandchildren. The 5-year-old is usually very fond of his grandparents. The 7-year-olds and 8-year-olds find a special pleasure in playing games with grandmother. She may have a special brand of patience or insight that they do not find elsewhere. The emotional bond with relatives is naturally different from the parent-child relationship and these extra bonds may exert a broadening beneficial influence on the developing personality of the child.

But there are hazards in this very relationship if the grandparents, unwittingly or otherwise, overstep their prerogatives. For better or for worse, the *mother and father* should be responsible for the government and management of the home. *They*, as parents (and not as children of their own parents!) should determine the goals of the family life. On matters of so-called discipline the judgment of the parents ought to prevail. Grandmother can claim no natural authority in these matters, although her consultative wisdom may often prove invaluable.

If she becomes too exacting, her misplaced strictness can easily disturb the domestic tranquillity. Perhaps she becomes too severe with the 9-year-old who is growing up, and who has a symptomatic aversion to being "treated like a little child." She may grievously misunderstand the 6-year-old when he bursts out with one of his aggressive verbal threats. Granted that a 6-year-old can, on occasion, be very "rude," his shocking behavior must be philosophically managed. He has even been heard to say, with probably more echo than comprehension: "If Grandma wants to be a burden, let her be a burden!"

The family is evidently a closely knit body-politic. Psychologically it consists of a veritable network of interpersonal relationships, subject to normal tensions and sometimes to abnormal frictions. The child's

developing image of family life is chiefly the outgrowth of the experiences which he undergoes in his own home-circle. If harmony prevails it will help to integrate his orientations and to direct his affections. No disquisition is necessary to show that maladjustment between husband and wife has far-reaching effects upon the emotional life of perceptive children. Marital divorce, therefore, can at times do deep psychological damage to a child.

Perceptiveness, of course, varies with maturity as well as inborn sensitiveness. It is interesting to note the stages by which the ordinary child achieves a progressive insight into the meaning of family life. At 18 months he likes the run of the house, is interested in household activities such as sweeping and dusting, and will soon participate in putting away the groceries. By three years he is helpful in little tasks and errands. By four years his identification with his home has become personal and self-conscious, even to the extent of boastfulness. At five years he may use the word "family" in a manner that suggests that he has attained an elementary concept of the family as a social group.

During the sixth year he gives many evidences of forging to a higher level of relationships, even though he, at times, seems self-centered, resistant, or overly mother-centered. He takes a new kind of interest in family outings, family secrets, and paternal and maternal relatives. SEVEN in his little serious way has a deepened sense of the family as an institution; he is proud of his home and family possessions; even his negative behavior betrays an emotional strengthening of the family ties. EIGHT is somewhat less subjective; he is interested in the family as a going concern, and at a festival gathering he is especially anxious that everyone should be having a full share in the good time. NINE likes to be on his own, likes to be with his friends and away from his family. It gives him a growing sense of self-sufficiency. But at the same time he shows increased awareness of family standards and of differences between his family and that of his friends. His greater sensitivity denotes a deepening personal identification with his family. The steady processes of growth have wrought extraordinary changes in his family relationships since the innocence of age five. During the teens there will be

another series of significant transformations; but the basic orientations are well-nigh complete by the age of ten.

SCHOOL

The school is a larger social unit than the home; but it is much less complex, and in many ways less decisive in the organization of the child's personality. It brings about, however, important extensions in the network of his interpersonal relationships.

The school-beginner is confronted with a whole host of problems of social adjustment. Even if he has acquired some background wisdom as a member of a nursery-school, he is obliged to make many readjustments; moreover, he is no longer a nursery-school child. He has the new impulses and the new uncertainties which come with being six years old. The smoothness of his school entrance will hinge largely upon his emotional maturity. The school world may seem so different from his home world that he will tend to retreat into the latter. In cases of acute conflict he may even react with a temporary stomach ache, or other symptoms of immature morale.

Usually, however, he weathers his transitional difficulties, and will soon regard that strange new adult, called a teacher, with various degrees of tolerance, awe and affection. He comes to consider her word law. He likes to please her, likes to be commended by her, but he is related to her not so much in emotional terms as through the activities and physical materials of the school program. When these activities appeal to him he makes a so-called good adjustment to the first grade. At seven years the teacher-child interdependence is more personal; and his adjustment to school is more dependent on an interpersonal relationship.

The pattern of that relationship, however, is, or should be, different from that between parent and child. Teachers should not take over the mother role, and parents, for similar reasons, should give all possible support to the role of the teacher. The amount of interplay of these

two roles will vary enormously with the age of the child and other factors. In complex situations the aid of a third intermediary in the form of a visiting teacher or educational guidance worker is very beneficial. Parent-teacher complications are avoided if the psychological needs of the child are always considered paramount.

The teacher-child relationship undergoes natural developmental changes as the child progresses through the elementary grades. In the kindergarten he responds best to a homey, friendly teacher who is chiefly concerned with releasing the spontaneous interests of the children. The successful first grade teacher typically likes to work with materials herself; she manages a fluent group as a whole, through skillful manipulation of her activity program. The second grade teacher depends rather more on perceptive personal contacts with individual children. The third grade children like a comradely, factual, business-like teacher, who, in their eyes, can be a good sport and keep the show running. Personality factors continue to count in the fourth and fifth grades; but the pupils are now less submerged by the school group. The 9-year-old and the 10-year-old have attained a measure of detachment. They understand themselves better; and they have some capacity to step aside and make an objective appraisal of the teacher. They respect a teacher who knows, and who can satisfy their critical interest in *Why?* and *How?* They are anxious to perfect their skills in the tool subjects, so they can launch out into the new fields which they are eager to conquer. If now and then they play a mild practical joke on the teacher, it is probably because they are sensing a new kind of confidence in themselves. An understanding teacher will know what it is all about in terms of social psychology, to say nothing of the psychology of her own self.

Social mechanisms are at work. School life is beginning more and more to pre-figure and to forecast sociological and even political end results. The child from five to ten is indeed an embryo citizen, if we recognize the embryological processes which are shaping his attitudes toward his fellow man in the schoolroom, on the playground and in his neighborhood. This leads to a brief consideration of the child's interpersonal

relationships in terms of the larger community of which home and school are a part.

THE COMMUNITY

It is difficult to draw any sharp precinct lines separating various areas of the community. Electrons keep to their orbits, but in the vast domain of interpersonal relationships, private, domestic and public circles are forever cutting across and into each other. When we say that radio and television have brought the outside world into the home (and the school!) we are scarcely using a metaphor; because the essence of the community is a psychological compound of awarenesses, ideas and attitudes. Developmentally, therefore, we can see the sketchy beginnings of the "community" in the early experiences which take the child beyond the confines of the family. Visitors from the outside come into the home; he greets the postman or the grocery boy; he takes a trip to the market; he joins a playgroup in the neighbor's yard.

It takes him many years to master the elementary structures of the community. He must become acquainted with it in terms of time and space, and its physical technology. Step by step he becomes aware of houses other than his own, of doors, windows, streets, curbstones, elevators, traffic lights, automobiles, airplanes. As physical phenomena these multitudinous impacts come without much order or sequence; but he assimilates them in terms of his interpersonal experiences. His social self alone can give meaning and order to the physical community. He becomes community-wise through other persons, particularly his playmates.

He has to adapt to them. Thereby he learns what a community is, both in peace and war. At 18 months he has scarcely made a distinction between persons and things; at 21 months he hits or hugs a playmate without discretion, without modulation; at two years his constant refrain is "Its mine." But at three years, as noted before, he shows a germinating capacity for cooperative play and can even wait his turn. This capacity increases through the years that follow. But the complexity

of the social situations also increases. Accordingly there are many manifestations of self-assertion and self-aggrandizement along the way. Normally the social and the selfish forces counterpoise each other so that the overall trend is favorable in spite of tattling, exclusions, cheating, sulking, ganging up, secret pass-words, wrangling, and combat. However, if the adverse behavior is not kept in bounds, and if it is not resolved *in its immediate contexts* by the child with the legitimate help of an adult, the overall trend can be decidedly unfavorable. The years from five to ten can breed delinquency and can lay the foundations for poor citizenship.

All interpersonal conflicts are specific; they have pattern and concrete context. When they are serious enough to demand adult intervention, they should not be handled too impersonally, or too intellectually. Appeals to virtue in the abstract are rather futile. The child is entangled in a specific situation, and *this* is the situation in which he needs assistance so concrete that his specific feelings and insight will be modified. It is a present incident, and the less said about the past or future the better.

The spontaneous groupings which take place on the playground are primarily determined by maturity factors. In the pre-school years there is a discernible progression from solitary to parallel, to sporadic cooperation, and to sustained cooperation and imaginative play. At seven there is an interesting developmental phase in which group and individual tendencies oscillate as though competing for dominance. The 8-year-old has a keen zest for group activity. At nine years his group consciousness is so strong that he likes to organize and to belong to a club, to accept a role in a group, to contend as a member of a group. The group solidarity is so strong that if a feud starts on the playground it is likely to carry over into the schoolroom,—an early example of how group loyalties overlap, even in juvenile years.

The spontaneous sex groupings likewise reveal the presence of innate maturity factors. The 3-year-old can affirm his sex; but he makes no sex distinctions in his playmates until about a year later. At four years

there is a tendency toward division along sex lines in group play. At seven years a boy and girl may pair off as playmates for a period of weeks or months, but the larger play groupings generally ignore sex lines. In another year boys and girls begin to separate in their play; and from nine years to the teens there is a definite period of segregation. The segregation is marked variably by self-consciousness, sexual modesty, shyness, passing hostilities, giggling, teasing, spying, feuds and derisions. However temporary these diverse manifestations prove to be, they indicate the complexity of the growth processes which underlie the social nature of man.

The culture attempts to bring the social and anti-social impulses of the child under control through morals, mores, and many minor conventions including manners. Such controls are indispensable; they become most effective in practical application when we recognize the developmental stage at which the child is functioning in a given situation. We cannot justly appraise the ability of the child to meet an interpersonal situation unless we make allowance for his temperament and estimate the difficulty of the demands made upon him.

RACIAL ATTITUDES

The problem of racial antagonisms has become so important in our American culture that it deserves consideration in the present chapter. Inter-racial tensions involve complex political, economic and religious factors, but for children the problems are mainly psychological and concern interpersonal adjustments.

Strictly speaking, a race or a racial group is based on community ancestry. Every true race doubtless has certain innate physical and mental characteristics which distinguish it. Races, like individuals, are not born alike. Many so-called racial differences, however, are not due to ancestry or heredity, but to cultural differences,—differences of language, nationality, tradition, manners and customs. In the last analysis we have to reckon with problems of individual and group behavior; that is, with interpersonal relationships.

Prior to the teens children tend to be catholic and cosmopolitan in their inter-racial contacts. A pre-school child may be as fond of a black doll as of a white. Most three-year-old children are scarcely aware of differences of color, or for that matter of sex and other individualizing characteristics. Polyglot groups fraternize and intermingle harmoniously.

At about four years of age an exclusive *in-group* feeling definitely asserts itself. Children still play together cooperatively; but every once in a while several children will separate and organize into an *in-group* which actively and noisily excludes the other children. The exclusion is more likely to be on sex lines than color lines. The seceding group, for example, sets up a post-office and with brave words ("You can't play with us!") repels the minority group. The exclusion is temporary. It may last for fifteen minutes or a forenoon. Then it vanishes. But it may recur on a morrow in new circumstances and with new groupings.

It recurs because it is a mechanism of development. The exclusions may seem very arbitrary, but they have a developmental logic. By banding themselves together for negative as well as positive reasons, the children spontaneously practice group action and intensify group consciousness. They are exercising their powers of social behavior. The behavior is relatively innocent. We do not need to take these transient bravadoes and intolerances too seriously.

In moments of verbal aggressiveness the 6-year-old may indulge in vigorous anthropological name callings; at seven he may shout a folk rhyme derision and even gang up on a "racial" victim. At eight and nine years clubs may be organized with exclusion as their primary purpose. The exclusion occasionally follows racial lines. Under normal conditions these racial discriminations are neither deep seated nor persistent. Under unfavorable environmental conditions they may prepare the way for unintelligent and stereotyped racial attitudes. Left to themselves ordinary American children are not inclined to develop serious inter-racial tensions and conflicts. But children, of course, are not left to themselves. They are constantly subject to the attitudes, the preferences

and the antipathies of their elders. Through deliberate imitation, and still more, through subconscious suggestion the children acquire the likes and dislikes expressed by their elders.

This suggests how cultural controls can be strengthened. Home, school and community should avoid the contagion of prejudice which comes from slighting remarks and uncritical generalizations. *Races and nations should not be slurred as groups. All persons should be appraised in terms of their merits as individuals.*

A sociologist recognizes a legitimate kind of attitude which is not colored by prejudice or antagonism, but which can be called a race feeling, namely "the ancient and deep seated preference of practically every individual for his own kind of people." Individuals then adjudge each other as individuals on the basis of proven and potential qualities. Justice between persons becomes a more significant and difficult virtue than indiscriminating benevolence in the planning and practice of social living.

An attitude is an habitual tendency to react in a characteristic manner in a given situation. The refinement of interpersonal attitudes accordingly constitutes one of the major tasks of elementary education. We know that adolescence is the period when all social attitudes, racial and otherwise, come to their final stages of development. This is the optimal period for educational control; but the basic groundwork should be prepared in the first decade of life. Children from five to ten have more insight into their mental processes than we give them credit for. We do not listen closely enough to what they say and how they say it. With shrewd suggestion and skillful spot guidance, while the occasion still tingles with its emotional realities, it is possible to help children toward more concrete self-control. We rely too much on abstract, remote, idealistic goals. Fortunately we improve our own interpersonal relationships when we become more perceptive and alert to the concrete interpersonal relations of our children.

GROWTH GRADIENTS

§1. MOTHER-CHILD

- 4 WEEKS—Cries for social attention; quiets if picked up.
- 8 WEEKS—Social smile at sight of a person's face.
- 16 WEEKS—"Recognizes" his mother.
Notices sounds, especially voices.
- 20 WEEKS—May cry when people leave.
- 28 WEEKS—Enjoys people. Demands more of the one who feeds him.
- 40 WEEKS—Enjoys family group.
Continues to demand more of mother but also a special positive response to her.
Smiles at mother when urinating.
May be best alone with one person.
- 1 YEAR—Very social.
Enjoys kissing.
- 18 MONTHS—Affectionate with mother when tired, in trouble, or if pants are wet.
May refuse to be toileted by anyone except mother.
- 21 MONTHS—More responsive to mother but also more demanding of her than formerly.
Calls mother back at bedtime for an extra goodnight.
Has definite demands as to how mother shall speak and act.
- 2 YEARS—More affectionate with mother and more dependent on mother.
Kisses and clings to mother at bedtime. Not only kisses but may verbalize affection.
Will now willingly sit on lap and accept affection from mother.
Begins to demand that mother do certain things: leave room and come back only when he finishes with toileting; go out of room while he feeds himself. Very insistent about such demands.
- 2½ YEARS—Child is at his best and at his worst with his mother. Most tantrums with mother but most loving with her.
The great number of mother-child difficulties occur as mother attempts to administer simple daily routines. Child squirms out of mother's hands when being ministered to and may slip under the bed. Actual physical restraint often necessary. Child makes two-way response ("I don't want to—I do want to") to nearly every situation.

Long bedtime rituals and much calling back for kiss, drink, to tell that he loves mother etc.

May want mother if in trouble at night, though quiets more quickly for father. Domineering with mother. Orders her around. Insists that she behave in certain ways.

Less clinging and less direct dependence on mother.

3 YEARS—Gets on well with mother. Mother usually the favored parent at this age.

Child may be of real help to mother around the house.

Child relives babyhood, talking it over with mother.

May want to get into parents' bed during the night.

4 YEARS—Great pride in mother. Boasts about her away from home, and quotes her as an authority.

Frequently resists mother's authority, both physically and verbally.

May threaten mother with: "Wait till I'm your mother."

5 YEARS—Mother seems to be center of the child's world. Relationship smooth, pleasant and not over-intense.

Likes to do things correctly, as mother desires. Likes to obey.

Likes to help mother, be near her, play or work near her. Tells her what he is doing.

Does not require all mother's attention though he likes her presence.

Expresses affection for mother: "I like you, mummy."

Sympathetic and helpful if mother is ill.

Likes to have mother at home when he returns home from school. Is disturbed if she is not there.

Accepts punishment from mother though it glides right off.

May say "You're a mean mommie." Blames mother, saying, "Look at what you made me do."

May talk of marrying mother (boys).

Again relives babyhood and likes to hear of mother's babyhood.

Needs, invites and accepts mother's supervision in learning.

6 YEARS—Mother no longer center of child's world; child himself now holds this position. This shift, and separation of child from mother has not yet been achieved; is merely being achieved. Leads to much difficulty and dissension. Child and mother are embroiled.

As at 2½ years, child is at his best and at his worst with mother.

Very sensitive to mother's moods, emotions and tensions.

Contradictory responses toward mother: says he loves her, then says he hates her; says he wishes she were dead, but worries that she may die.

Unwilling to accept help which he needs from mother.

Child is rude, resistant, and argumentative toward mother. Speaks rudely to her; says "No I won't," "Try and make me." Strikes her.

What mother does is important, not, as later what she thinks.

INTERPERSONAL RELATIONS

Not good about accepting directions, and is hard to punish.

Tantrum response.

Child "takes things out" on mother. Threatens: "I'll get another mother."

7 YEARS—On the whole child gets on well with mother, likes to do things with her at times. A "we" age for mother and child.

Relationship more companionable and less intense than earlier.

Variable in this as in other things: may become moody and sulky, "mad" at mother.

Likes to argue with mother: "But mommie . . ." However you can begin to reason with him and appeal to him ethically.

Easier to discipline as he is sensitive to praise and blame. Obeys mother quite well if he hears what she says.

May be extremely proud of his mother and self-conscious about her in public.

Occasional strong battle of wills between child and mother.

8 YEARS—Child "all mixed up" with mother; haunts her; wants all her attention.

Strong physical and verbal expressions of admiration and affection for mother.

Tries to live up to what he believes is mother's standard for him; often feels that he fails.

Child has definite standards of how mother shall speak and act (almost like 21 months). Unhappy if she fails to respond in the expected manner.

What mother thinks as well as what she does about child is important to him.

Obeys mother if she words direction in way which pleases him.

Very sensitive toward mother: tears likely to well up. May be sensitive even to a change in facial expression. An emotional relationship.

Likes to please mother and very responsive to praise.

May be jealous of mother and father when they are together.

9 YEARS—Child wants to be on his own and makes less demand of time and attention from mother because he is busy and self-centered. The relation smoother, provided that mother treats child with respect for his increased maturity.

Child may be demonstrative, affectionate and anxious to please, at times.

Boys especially react against mother's demands that they be neat and clean. They are becoming more independent about large matters: mothers react by exercising authority in little matters.

Some are quite indifferent to mother's directions, admonitions, scoldings. They have a "deaf ear" at home.

Some are sulky, "growling," fault-finding with mother. Others are bold and argumentative.

Best relation with parent in regard to some activity which really interests both: girls and mothers share interest in cooking, clothes etc.

He does not like to be reminded, by mother, of himself as a young child. Some boys may be embarrassed at being bathed by mother.

Beginning to "put things over" on mother.

Opinion of contemporaries may be much more important than that of parents.

§ 2. FATHER-CHILD

- 8 WEEKS—Social smile at sight of person's face.
- 12 WEEKS—Enjoys evening play with father.
- 28 WEEKS—Enjoys people but demands more of mother than of father.
- 40 WEEKS—Enjoys social play with family group.
Vocalizes "dada" and "mama."
- 52 WEEKS—Likes reciprocal social games with any member of family.
- 18 MONTHS—May enjoy moderate rough-housing with father.
May refuse toileting or other routines administered by father.
- 21 MONTHS—Father coming in unexpectedly at mealtime may be disturbing.
Any change in routine may be disturbing and father often unwittingly causes such changes.
Father likely to step in firmly with rigid requirements: "Time my son stayed dry" etc. when child is not quite ready for them.
- 2 YEARS—Father often a great favorite but child may demand mother if in trouble or if tired.
Child may find it difficult to be with both parents simultaneously.
- 2½ YEARS—Very definite ideas of which person he wants to have do things for him.
"Mummy do" or "Daddy do." Varies from day to day or week to week.
May ask for mother at night though may quiet more quickly for father.
Domineering with father as with mother.
Going to extremes, the child may be very demonstrative toward father at one time, and at another may say "I don't like you." Father usually surprised and hurt by this sudden "dislike."
- 3 YEARS—Mother commonly the favored parent at this age, but father can take over in many situations.
Child clings less at bedtime and may go to sleep more quickly for father.
Each parent should have authority over certain *kinds* of situations; should not try to divide authority or child will play one against the other.
- 3½ YEARS—Girls propose to fathers. Say "I love."
- 4 YEARS—Child boasts about father outside of home. Quotes him as an authority.
Excursions and times alone with father greatly prized, though father may need to use techniques.
Some, however, say they hate father, especially if his being at home cuts them off from mother.

- 5 YEARS—Some now for first time accept father when mother is ill.
Relations with father smooth, pleasant, undisturbed.
Enjoys special occasions (excursions) with father.
Boys, especially, may prefer father to mother, but this is exceptional.
Takes punishment better from mother than from father.
Fond and proud of father, and may obey father better than mother.
- 6 YEARS—Both fears and admires father more than mother.
Usually respects father's word as law and does not question it.
Is not rude and resistant to father as to mother.
Feelings hurt by a cross word from father.
Child may believe that father—in his office—knows everything that happens.
Many situations can be carried through more successfully and with less friction by father.
Child enjoys playtime with father and may demand every minute of father's time while he is in the house.
- 7 YEARS—Variable from child to child and from time to time.
Father's role may be slight at this age as child is occupied with his own activities.
Some, especially boys, "worship" father, think he is wonderful. Have long, confidential talks with him. Confide their worries, troubles and even sometimes their misdeeds.
Girls are more sensitive to any reprimand from father and may be jealous of his attention to mother.
- 8 YEARS—Relationship with father less intense but smoother than that with mother.
Less ardent expressions of affection toward father but less demanding of him.
Can allow him to make a mistake.
Likes father's company but does not insist on his complete attention.
Respects father's opinion and authority and (usually) obeys his commands.
Father frequently needs to step in to settle disputes between mother and child.
Child's best responses may come with his father at this age.
- 9 YEARS—Relationship smooth when father respects child's increased maturity.
Boys often come into new relationship with fathers, sharing real interests. Child shows respect for father's technical knowledge. Father-son may group together against female interference.
Very sensitive of criticism from father. Thinks highly of his good regard.
Relationship with father largely through things they *do* together.
Most "approve" of father except for occasional specific criticism of his actions, as that he drives too fast—or too slowly.
May feel superiority in pride over father's occupation.

§3. SIBLINGS

- 18 MONTHS—Calls all other children "baby," but treats them as objects rather than as persons and no marked interest in them.
May like to look at new sibling, but does not wish to play with him.
May accept attention from older sibling, but more responsive to adult than to children.
- 2 YEARS—Not much interest in siblings. Takes them for granted. Allows older siblings to play with him on occasion. May give and accept affectionate advances.
- 2½ YEARS—Difficulty with siblings as with adults.
Cannot share or wait a turn; cannot do things someone else's "way."
Over-rigid in demands; tantrums if things go wrong.
May express jealousy of younger siblings.
- 3 YEARS—Part of the time may get on well with older or younger siblings.
May tease older siblings, break or spoil their "things"; cry if older siblings retaliate.
May accept new baby and take a moderate interest or even pride in him; or may show jealousy.
May accept mothering from older siblings.
- 4 YEARS—Not very good. Out of bounds with siblings as with other people.
Old enough now to be a definite nuisance to older siblings.
Likely to be selfish, rough and impatient with younger siblings.
Much quarrelling over toys and physical fighting.
- 5 YEARS—Usually good with younger siblings. Girls especially are protective and kind, like to take care of them. Helpful rather than domineering.
May be good when someone else is present, but when alone with younger sibling may take things from him or tease him. May be better outdoors than indoors.
Should not be given too much responsibility over younger siblings as not dependable.
Often plays well with older siblings, accepting the "baby" role in domestic play.
- 6 YEARS—Not usually as good with siblings as at five.
Likes to teach younger siblings, but also may "egg them on"; likes to see them scolded; bosses them, hurts them, fights with them, tattles on them.
Gets on better with siblings outdoors than indoors.
Some are good with siblings except for the "usual spats."
Much quarrelling with older siblings.
- 7 YEARS—Chiefly good with siblings.
Plays "big brother" (or sister) to younger siblings and likes to protect them.
Boasts about older siblings and is proud of them.

INTERPERSONAL RELATIONS

Variable, however, from time to time: "Bickers with sister but thinks she's cute"; "Protects sister but teases her." A few are consistently bad: "fight like cats and dogs."

Frequently jealous: wants to do things which siblings cannot or are not allowed to do; fears that sibling will "put something over on him."

8 YEARS—Less good with siblings.

Some are consistently bad, teasing and being selfish and quarrelsome about possessions.

Others are variable: sometimes protective and thoughtful; at other times getting down to sibling's level and teasing and fighting.

Some are "kind, though they scrap around."

9 YEARS—Frequently get on well with siblings. May be thoughtful and protective if siblings are younger; proud of and try to emulate older siblings.

Some trouble if near same age: may argue, fight, compete, accuse. But often show considerable loyalty to siblings, uphold them.

May in presence of contemporaries be much embarrassed or disgusted by actions of siblings. May dislike their "messiness."

Boys often wrestle and "fool around" with siblings.

§4. FAMILY

16 WEEKS—Social play with one parent or the other.

Differentiate mother and father from other people.

28 WEEKS—Likes attention from parents or sibs.

40 WEEKS—Likes to be with the family group especially in morning or late afternoon.

52 WEEKS—The height of social give and take and imitation games with family.

18 MONTHS—Likes to have run of the house.

Interested in activities of the household such as sweeping, dusting, etc.

Likes to bring "daddy's slippers," etc.

Expects certain ministrations from certain members of family.

21 MONTHS—Knows which objects belong to each member of the family and can verbalize

"This is mummy's," "This is daddy's."

Likes to have his own places for things.

Likes to participate in household activities, as putting away groceries.

2 YEARS—Is quite an acceptable member of the household: does not get into things as much as formerly, helps make beds, puts away silver, brings ashtrays.

Family is nearly the child's whole world though no verbal concept beyond the words "Mummy," "Daddy" and names of sibs.

FAMILY

Likes birthday party with just the family or perhaps one other child, though the party is the food, to him.

2½ YEARS—Very strong ritualistic sense of having everything at home in its usual place and done in its usual way.

May rule the household with an iron hand with his ritualistic demands.

Is building up his sense of home and family in a practical way.

Strong insistence on "Mummy do," or "Daddy do." Each one to his own role.

Can use the word "home" if asked "Where is mummy?" Will reply, "She's home."

3 YEARS—Fewer ideas and demands about the way the home should be run.

Really helpful in little household tasks: wiping dishes, running household errands.

Likes to go to market with mother, or to follow her about the house.

Likes the party aspect of family holidays.

Likes to go visiting, as lunch or afternoon with grandmother; visit to another child.

Likes to visit relatives.

4 YEARS—Is developing a strong sense of family and home.

Quotes parents as authorities; boasts about them.

Compares the outside world to his home, to his home's advantage. His family's way of doing things is for him the right and only way.

Family, as earlier, continues to be all important in fact, even though he has not too clear a structured concept of family.

Likes family picnics and other outings.

Looks forward to visiting relatives; to trips on train or by car.

Likes to be taken on nature trips. Excursions alone with father especially prized.

5 YEARS—May have strong feeling for family. Likes the idea of the "family," likes to talk about it, to use the word.

Enjoys family picnics and other outings.

Likes the details of family celebration of holidays.

May be very proud of his mother and of his father.

Likes to hang around mother and to help her around the house, to go downtown with her.

Boys want to be mother's husband. Interest in idea of marrying.

Seems to assume that he and parents are eternal and that parents are also omniscient and all powerful.

Usually very fond of grandparents at this age. Likes to visit them. Likes to hear grandmother's stories of his or his parent's babyhood.

Some interest in the fact of grandparents, two on each side of the family.

6 YEARS—Not much thought about, or emphasis on the concept of the family. Child is too egocentric at this age. However, school brings to him some experience with other children's families who may have different standards and ways of doing things. Some comparison.

INTERPERSONAL RELATIONS

Likes family outings though his behavior frequently does not hold up well. He teases for things he cannot have, is restless to get home, gets into trouble.

Enjoys family secrets, as about Christmas presents.

May cooperate in family matters, but not as naturally as at five.

Boasts about his home.

Likes to go downtown with mother to make some small purchase for himself.

Child begins to suspect that mother will one day die and thus destroy present family setup and someone else will have to take care of him. He thinks about what might happen in this case. May think in a long, orderly succession of ancestors and parents dying, then he will grow up and reproduce.

Likes to have mother at home when he gets home from school.

Argues with parents and likes to prove them wrong.

Wants to hear about parents' babyhood.

Interest in relatives expanding: way back in the line, also spreads to cousins, uncles and aunts.

Likes to talk about attributes, activities and possessions of aunts, uncles, cousins.

May be very rude ("bratty") to grandparents, especially to grandmother, and may act badly if he visits grandparents, although he might be better if his own parents are not there.

7 YEARS—Interest in and feeling for family very strong at this age.

Serious about such concepts as "home," "family," "government."

Very proud of home and family possessions. May think his family is rich because they have such nice things.

Compares own home and family to others, to the detriment of others. (One child loved home so much she hoped that mother and father would move out when she married so that she could have their home.)

Proud of family, parents, and especially of older siblings.

Is strengthening feeling about family even in negative ways. Thus may threaten to run away "from this family." May think that family does not like him. Or may believe that he is merely adopted, (and is actually of more rich and powerful parentage). May say he doesn't want to be "a member of this family."

Is interested in his place in the family, and in relation to all members of the family.

Interested in his own and everyone's "place" at the table, in the car, etc.

With characteristic variability fluctuates between love for family and anxiety that he does not belong.

May prefer to stay at home and play rather than go outdoors.

Variable about helping: may be very sweet and helpful and then very disobedient.

May inquire *why* he should help parents.

May like to have house orderly and attractive but does not contribute much toward this.

May be interested in doing his *share* of the work: "That's my job."

Enjoys family outings. More interested in what goes on and behaves better than he did at earlier ages.

Likes to have mother or grandmother play games with him.

Wants the "family" to have a baby.

May realize that oldest die first and that just as grandparents may have died, later parents will die and then he himself will one day die.

8 YEARS—Interest at this age seems to be more for mother than for family as a whole.

Relationship with mother very close and exacting. Child "haunts" mother.

Very insistent about both parents doing and saying things "just so." Quick to point out a fault or error on part of parents.

At seven, was building up a concept of family. Now tries to make it really work.

Is very much aware of people's reactions and is very anxious to have things "go right" in family, as at festival like Christmas, wants everyone to get gifts and be pleased.

Until this age seems to assume, unless there is overt evidence to contrary, that all is well between mother and father. Now worries about this relationship along with other relationships. May express some jealousy of mother and father's being together.

May be very curious about telephone calls, mail, people's conversation.

Through this age may think own home is perfect.

May be the last age for whole-hearted enthusiasm about family outings.

Wants to have house neat and tidy though he does not keep own room neat.

May do home tasks if rewarded or some goal or prize offered, but not anxious to help around home for the sake of helping or for the sake of the home.

Interest in family background, relatives on both sides.

As at six, may be rude and impatient with grandmother, but may greatly enjoy long play periods with grandmother who may have more patience for the absorbing detailed play which the child requires, than does his mother.

Very strong demand for mother's time and attention. Likes to have her with him when he practices his music lesson. Likes to have her play games with him.

Wants her there when he gets home from school, as at six.

9 YEARS—Concept of family important to most, even though in practice they like to be away from family, on their own, with own friends.

May be very sensitive as to how family and family possessions compare with those of others. May want a better house. But some still feel that anything of their own (city, house, father's occupation) is superior.

May be shamed in public by behavior of siblings or even of parents.

Some are indifferent, self-centered, irresponsible so far as family life is concerned.

"Taking part in the home" doesn't mean a thing to them. Prefer not to go on family excursions.

Others have "strong feeling for family." Feel need of parents' care and happy to be cared for.

Many are more helpful than formerly with younger siblings.

§5. MANNERS

- 18 MONTHS—Child says "Tata" which means "take it" or "give it to me." Probably does *not* mean "thank you."
- 2 YEARS—Child may enjoy saying "Bye-bye" or "Goodbye." May even greet an arriving visitor with this phrase.
If parent directs, "Say Goodbye to Mrs. X," child may parrot, "Goodbye to Mrs. X."
- 2½ YEARS—Child may use "Good morning," "Goodbye," "Please," "Thank you," appropriately if he has heard them used. Parents are proud of this accomplishment. It usually drops out after the novelty has worn off.
- 3 YEARS—Parent or teacher may suggest to child, "It sounds better when you say 'please.'"
Child may or may not respond positively to this.
A few children respond reciprocally to the phrase "Good morning."
Less likely to respond to "Goodbye" as they are usually in a hurry on leaving.
- 4 YEARS—Very little spontaneous and unprompted use of conventional phrases of politeness.
Shows off and acts very badly before company.
- 5 YEARS—Some are able to greet contemporary age friends, let them into the house, etc. A few, if reminded, can say "Please" and "Thank you."
Some may be able to shake hands with adults and say "How do you do," but this is a learned response and does not seem natural to the child. Many are unable to make a conventional social greeting without undue embarrassment.
Usually docile before company though may retreat to 4-year-old showing off and noisy, conspicuous behavior. Likes to be present.
- 5½ YEARS—A verbal child may be able to say that you should keep quiet, answer people when they are talking to you, always say "Please" and "Thank you," always remember to say "Good morning," "Good afternoon," "Good evening." This knowledge may exceed the child's ability of performance.
- 6 YEARS—Marked difficulty in formal social situations, though with people he knows and likes he can open the door and with enthusiasm say, "Come on in."
Not yet good at shaking hands with strangers and saying "How do you do," or "Goodbye." Has difficulty in responding to the query, "How are you?"
Forgets to say "Please" and "Thank you." "Goodbye, I had a nice time" is especially difficult.
Most can at least look squarely at people who greet them. No longer hang their heads.
May behave very badly before company, though some are better away from home than at home. Very bad, however, at social gatherings such as birthday parties.

May be very rude in company without meaning to be: "Oh this soup is terrible!"
Many can entertain contemporaries (if not too many at a time), offering and receiving hospitality.

Uses telephone. Some can dial.

If parent gives exact words to use in social situation, child may be able to repeat them.

7 YEARS—Many can greet people with "Hello," looking straight at them, better than saying "Good-bye."

Very likely to rush in front of others to secure his "place."

Behaves quite well in the presence of company for a while, then withdraws to own activity.

Considers it important to say "Excuse me," or "I didn't mean to," if things go wrong.

Social telephoning to friends.

Can listen courteously in an audience situation for short periods (about 20 minutes).

Can talk about experiences in a pleasant manner.

May shake hands responsively though not with ease.

8 YEARS—Can verbalize "proper" greetings and "proper" goodbyes.

Some carry on real social conversation with adult.

May monopolize mother's attention if company is present.

May be very rude, as to grandparents.

Table "manners" now considerably improving in a new situation.

Many have excellent company manners away from home.

Marked individual differences between those who love formalized things and those for whom artificial steps are difficult.

Much social telephoning to friends.

9 YEARS—May be ready to shake hands spontaneously and with ease. May enjoy this formality. Can manage adequate formalized greetings if he takes time for them.

"Manners not deliberately bad, just never thinks. No consideration for others, no gracious courtesies." Child often simply ignores adults.

Marked individual differences here: some are "naturally polite," with others manners do not "come natural."

May behave with extremely good manners in public, as at a restaurant.

§6. TEACHER-CHILD

18 MONTHS—Child needs close and constant physical supervision of teacher.

Relation with teacher effected through objects, physical orientations and gestures rather than through words.

Teacher's chief role is protecting and supplementing.

INTERPERSONAL RELATIONS

- 2 YEARS**—Child adjusts to school through one special teacher who greets him, stays near him, and helps him to initiate activity.
Usually knows teacher's name and responds to one teacher in preference to others.
May form a close attachment for this teacher.
Child most likely to address teacher if he wants something from another child.
May not ask for help, therefore teacher must note when he needs it.
Teacher can direct child through words or can pick him up bodily.
- 2½ YEARS**—May need considerable adult direction in his play.
Teacher needs to give himself and child leeway so as not to lose "face" in situations.
Teacher must not take over too much. Child says, and means, "Me do it myself."
Can use language in handling child since his comprehension is greater.
Teacher needs a wealth of techniques to draw on to prevent children's disputes.
- 3 YEARS**—Child likes to talk to teacher conversationally. However can now address other children directly and does not need to approach teacher first.
Likes to help teacher, as in setting table.
Likes to listen to teacher read stories.
May listen to reason and modify his behavior.
Responds to whispering, to idea that he is sharing a secret with teacher.
Seldom asks teacher for help in solving his difficulties, though teacher may need to step in.
- 4 YEARS**—Greets teacher, but now more interested in talking to other children.
Responsive to verbal suggestion or direction from teacher.
Teacher has less need of techniques.
Teacher needs to provide ahead plenty of play materials.
Teacher needs a wealth of information at her fingertips to answer questions.
Child can often be handled through silly language which he enjoys.
Child himself enjoys taking on a teacher or mother role with new or shy children.
- 5 YEARS**—Child likes teacher. Relationship is matter of fact and pleasant.
Child obeys teacher as a matter of course. Quotes her as an authority.
Relationship less personal than it will be later.
Child may complain, "the teacher makes me do things," "the teacher makes me stay in line."
Needs immediate attention from teacher.
Refers to teacher for materials, to tell experiences, and to show his products.
Seeks teacher for approval and for affection.
- 6 YEARS**—Child related to teacher through materials and activities.
Likes to conform to teacher's demands. May even like discipline.
Usually likes teacher, and likes to please her.
Wants and likes to be commended. Wants praise, attention and help from teacher.
In awe of teacher. Her word is law.
May need teacher to sit next to him and to work closely with him for a period.

TEACHER-CHILD

Apt not to know when to ask for help from teacher.
Likes teacher to talk with him about what he is doing.
Looks for teacher immediately on arrival, wants to be assured that she is there
Brings things to school for her.
Does not like to have teacher laugh *at* him.

7 YEARS—More personal relationship. Crushes. Boys especially like to stand by teacher and hold her hand; to bring her presents.

Teacher really paramount in school. Child depends on her. If teacher holds up child's behavior, all goes well.

Because of personal relationship, child, girls especially, may think teacher is mean and unfair, or may act silly toward teacher.

Poor transitioners may remain loyal to first grade teacher and prefer her.

Child depends on a word from teacher often to start the simplest task.

May be interested in doing something forbidden when teacher is out of room.

Wants own teacher and does not like a substitute. Likes to be with her, to sit with her.

Makes an impatient demand for teacher's attention and assistance.

Asks teacher, "Who did the best drawing?" "Did I get 100?"

May be concerned that teacher does not like him.

8 YEARS—Teacher less personally important. Child wants her to be a part of group.

Child usually likes teacher. May evaluate: "She looks sour but she isn't."

Fewer complaints about teacher as well as less ardent liking.

Children like a teacher who is factual, business like, comradely and a good sport

Pleased at idea of teacher making a mistake.

Likes to have some individual contact with teacher relative to tasks to be done, but better able to wait for teacher's attention than at seven.

May be concerned about how teacher treats a friend.

Likes to help teacher, to pass papers, etc.

Likes to do things in order, in certain ways, and tells teacher if she deviates.

Wants teacher to enjoy activity with him, to have a turn.

Tells teacher what another child is doing.

Teacher can handle with humor and can control by her silence.

9 YEARS—Most seem to like teacher well or even be devoted to her.

Often a very strong feeling one way or other: teacher is "terrible" or "wonderful"

Great stress on whether teacher is fair or unfair.

Tendency toward crushes and this makes child shy with teacher.

Perhaps less talk at home about teacher than earlier.

Teacher needs to be aware of individual intellectual difference in children, and to help them perfect their individual intellectual implements for later use.

Child wants to be independent of teacher both in work and in play.

Still prefers teacher's assistance when needed in work.

Critical of teacher in relation to a specific subject. May blame her for a lowered grade.

INTERPERSONAL RELATIONS

Wants teacher to be reasonable.

May report on her mannerisms or conduct in a specific situation.

§7. CHILD-CHILD

18 MONTHS—Treats other children as objects rather than as persons: pokes, pulls, pinches, pushes.

21 MONTHS—Active but unmodified approach to other children: pulls hair, knocks them on head, hugs too tightly.

2 YEARS—Parallel play, which needs close supervision.

Like to watch each other at play.

May hug and kiss each other.

Cannot share though may, at adult suggestion, be able to give other child a substitute toy. "It's mine" is a constant refrain.

2½ YEARS—Quarrelling, arguing and physical combat over materials.

Cannot share; wants what others have.

Can sometimes give or accept substitute toys.

3 YEARS—Cooperative play beginning to replace parallel play.

Beginning of ability to share.

Can sometimes settle own disputes verbally or by giving other child a substitute toy

Beginning to take turns.

Conversational approach to others.

Has preferred friends. Use of word "friend."

At teacher's suggestion may take charge of younger or shy child.

3½ YEARS—Cooperative play, two children or more than two.

Gets on well with preferred friends but excludes, hits or pushes others.

Play may be stormy and quarrelsome.

Beginning of temporary attachments to some one companion, often of opposite sex. Girls often initiate these attachments.

4 YEARS—Will share or play cooperatively with special friends.

Very conversational with friends. Good imaginative play.

But *much* excluding, tattling, disputing, quarreling, verbal and physical.

More interested in children than in adults.

May spontaneously take charge of younger or shy child.

May have special friends of same sex.

5 YEARS—Plays well with other children especially if groups are kept small.

Does not insist on having his own way and does not worry about behavior of others.

Prefers playmates of his own age.

Some are too rough, too bossy, or cry too readily to get on well in unsupervised play.

May play better with another child outside, rather than indoors.

6 YEARS—Marked interest in making friends, having friends, being with friends. Uses term "school friend" or "playmate."

Seems able to get along with friends but play does not hold up long if unsupervised. Quarreling, physical combat. Each wants his own way.

A good deal of tattle-taling.

May be very dominating and bossy with some playmates.

Much exclusion of a third child: "Are you playing with so and so? Then I'm not playing with you."

Cannot bear to lose at games and will cheat if necessary to win. Also thinks friends cheat or do things the wrong way.

Many are said to be a "bad influence" on playmates or are thought to play with someone who is a "bad influence."

May prefer slightly older playmates.

7 YEARS—Much fighting with playmates though less than at six. May leave the scene if things go wrong.

Less domineering, less set on having own way, less worry about how others do things.

Tattle-taling and some worry about goodness and badness in others.

Learning to lose but must win in the end.

Begins to be aware of friends' attitudes as well as of their actions.

Needs to be happy himself in a two-way relationship but does not worry much about friend.

Prefers older playmates.

Boys may have trouble with older boys who are bullies.

8 YEARS—Group play better: more cooperation, less insistence on having own way, less worry about behavior of others. But any unsupervised period of play may end in dissension.

With "best friend" an effort to work out a relationship. Friend's attitudes important. Child wants to be happy and wants friend also to be happy. Much arguing, disputing, getting "mad" caused by this.

Can take part in competitive games and can sometimes lose with grace.

"Enemy" is a word frequently used.

May again prefer same-age friends.

Sub-verbal appraisal of selves and others; controlled somewhat by criticism of others.

9 YEARS—Most have a special friend of same age and sex, as well as a group of friends.

Gets on well with playmates in spite of some quarrelling and disagreement. Interested less in relationship with friend and more in what they do together. The activity or goal is important. Real cooperative activity.

INTERPERSONAL RELATIONS

The gang or club is important. May subordinate own interests and demands to getting along in the group. Try to live up to group standards and criticize those who do not.

Girls beginning to like to spend the night with each other.

Beginning of crushes on older child or adult.

Evaluation—not just judging, behavior of others.

Much good-natured rough-housing and wrestling among boys. Boys have considerable trouble with "bullies" of own age or older.

Boys dash about shouting; girls giggle and whisper.

§8. GROUPINGS IN PLAY

1 YEAR—Social with family group. Shy with strangers.

18 MONTHS—Solitary play. Not ready for play with other children.

2 YEARS—Likes to be with other children. Parallel play.

Not ready for cooperative play or for extensive group activity.

No sex preference in play.

2½ YEARS—Beginnings of cooperative play together in small groups. Several may sit together on a block train.

Chiefly parallel play and imitation. Little real cooperation or sharing.

No sex preferences in play.

3 YEARS—Some spontaneous group play, taking different roles, i.e. one conductor and several passengers in train play.

Group play may be quite harmonious.

No distinction between sexes in play.

Racial attitudes Child not aware of racial differences. May fear person of different color.

3½ YEARS—Group activity, but some of group may discriminate against others, and forcibly exclude them.

Beginning of temporary and shifting attachments to some one child of opposite sex. Girls often initiate these attachments. Strong feeling for "friend" of opposite sex.

Pairings in same sex not as characteristic.

Racial attitudes Discrimination in group play may or may not be along sex lines; usually not on race lines.

4 YEARS—Cooperative and imaginative group play—sustained dramatic or imaginative play.

Tendency in group play for division along sex lines. Play groupings fluid. Some chanting at other sex, in an excluding way.

Some have special friends of same sex.

GROUPINGS IN PLAY

Racial attitudes Exclusion from play groups may be along sex lines; usually not along race lines.

5 YEARS—Children mostly play in groups of two; seldom more than five in a group.

Personnel of any group is rapidly shifting.

Little solitary play, but often parallel play.

Imaginative play gives appearance of being cooperative though actually involves little real cooperation. Each child carries out his individual ends and has little concern for the group as a whole.

Children symmetrically organized in play, ready for all relationships. Largely ignore sex in choosing a playmate or a group of playmates.

Most frequent grouping is of two children of same sex. These pairs of friends may be shifting.

Racial attitudes Usually no concern about racial differences.

6 YEARS—Much group play, especially in imaginative play of house, store. Groupings so flexible that any one child may leave or join the group without being noticed.

Little organization to group play, though he can choose sides and may accept direction of a domineering older child or teacher.

Little concern for welfare of group; interest still primarily self-expressive.

Leaders are leaders of small group only (in school).

Little solitary play.

Considerable time spent in play with constant friend.

As at five, may group for games ignoring sex lines.

Some constant friendships begin to persist.

Parties: behavior diffuse, child is "all over the place," all want to have presents and win prizes.

Racial attitudes There may be benign verbalization of racial differences but usually no exclusion in play. In anger, some name calling stressing any distinctive characteristic, race among others. Child himself is beginning to be aware of his own race.

7 YEARS—Play in pairs (same or opposite sex); but also much group play.

Group play not well organized and still primarily for individual ends. But beginning of real cooperation.

Several children "gang up" against some other child.

Child worries about his place in the group, afraid he will not hold his own.

Girls are eligible for Brownies (preceding Girl Scouts), or Bluebirds (preceding Campfire Girls). Boys are eligible for Cub Scouts.

Largely ignore sex lines in play groupings. But if by chance children have separated along sex lines they may verbalize this in exclusion chanting.

8 YEARS—Child enjoys group activity. Accepts fact that his role in group is to some extent determined by his abilities and limitations.

Real cooperative play and carrying out of simple projects.

Not ready for complex rules, but can accept very simple ones, or directions.

INTERPERSONAL RELATIONS

Organization of simple same-sex clubs with names and passwords, of temporary duration.

Beginning to have a "best friend" of same sex.

Boys and girls separate off in play. Prefer play with same sex. Girls conscious of this sooner, but boys probably the first to actively *exclude* child of other sex from play.

Children will not play long in a group in which they are only one of their sex.

Racial attitudes Ganging up against some one child may be along race lines.

Calling names may stress race differences.

9 YEARS—Informal clubs, still short-lived and very varied though a little longer duration and more structure than earlier. May be for some definite purpose: paper club, press club, scrapbook club, sewing club.

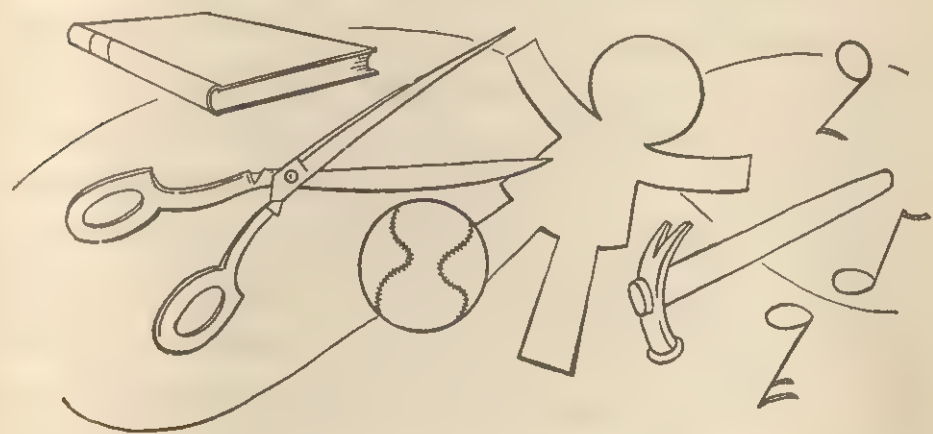
Clubs are mostly secret with passwords, initiations, hide-aways, codes, secret language, dues, club bulletins. Rigid exclusion of non-members. But clubs "don't last."

More formal clubs under adult leadership: Cubs or Brownies.

Children like to act as a group and compete as a group. Accept own role in group and can evaluate contributions of others. May be more interested in success of groups than in own individual enjoyment. In games or for projects, organization is complex and detailed, cooperation is excellent.

Birthday parties: usually own sex only. Rather complex entertainment as magician, treasure hunt, athletic event and refreshments.

Racial attitudes Very little interest or comment. May say that Japanese and Chinese are both yellow, but Japanese are horrible and Chinese nice.

PLAY AND PASTIMES

CHILDREN reveal themselves most transparently in their play life. They play not from outer compulsion, but from inner necessity,—the same kind of necessity which causes a kitten to chase a rolling ball, and to play cat and mouse with it. The kitten is not a cat, and the ball is not a mouse; but in all this playful pouncing we see a preliminary exercise of serious adult activities. The kitten's play is also reminiscent because it involves a rehearsal of activities inherited from the ancestral generations. It is indeed a zestful merging of past, present and future.

A child's play possesses similar qualities. It rises spontaneously out

of instinctive promptings which represent developmental needs. It prepares for maturity. It is a natural enjoyable exercise of growing powers.

No one needs to teach a child to play. Even a young infant knows how. What does a 12-week-old baby do with his "idle" time? He practices all his budding abilities in the four major fields of human behavior, namely, motor, adaptive, language and personal-social behavior. He flings his arms and flexes his legs (motor); he fixates his eyes regardfully upon his fisted hand (adaptive); he coos and chuckles (language); he vocalizes on his mother's approach (personal-social). He is ceaselessly active during his waking hours, playing in one form or another. Play is his work, his business.

Play never ceases to be a major business throughout childhood. Nature plants strong play propensities in every normal child to make sure that certain basic needs of development will be satisfied. The culture directs, restrains and redirects these play impulses into approved channels, but always at the risk that the child will not get an optimal measure of the kind of play life which is best suited to his stage of maturity. All things considered the modern child has too many set tasks, and not a sufficient amount of untrammelled leisure and self-activity.

Needless to say, a child does not play because he is too lazy to work. Often he puts forth his most strenuous energies in moments of play. He concentrates with his whole being and acquires emotional satisfactions which he cannot get from other forms of activity. Deeply absorbing play seems to be essential for full mental growth. Children who are capable of such intense play are most likely to give a good account of themselves when they are grown up.

The gradations of play interest are part and parcel of the very process of growing up. Take for example such ancient play materials as sand and mud. They must have figured very early in the playful manipulations and workmanship of our remote ancestors while idling at a sea or lake shore. Sand appeals even to the 18-month-old. Although he is naturally a run-about he is so intrigued by the tractability of sand that

he will sit for a long period filling and dumping, refilling and redumping endlessly. In this self-perpetuated play he is getting a delectable mixture of visual, tactile, and motor experience, and a sense of mastery which feeds his mental growth. His later exploitations will be more sophisticated but they will have a similar developmental function.

Already at two years his play is more elaborate; he mixes stones with his sand; he fills a pail and lugs it back and forth; he plays with water too, filling and emptying dishes. In another year he makes mud, combining the basic elements of earth and water. He even fashions them to his devices, moulding, patting and smoothing his plastic mud into cakes and pies.

By five years he does not like to be confined by the sand box; he prefers a generous heap of sand which he can dramatically use as a stock pile for filling his truck which will transport and retransport its load to distant points. The 6-year-old operates on a more imaginative scale; and combines sand and water to build definite structures. The 7-year-old elaborates still further. He likes to combine phantasy-play with his digging and construction. He builds streets and houses, lakes and river beds out of sand and mud; and as he builds he chatters, soliloquizes or ruminates. And so he weaves new threads into his growing mental structures. Perhaps he is already preparing to become an engineer. There is an element of anticipation in all play; and if he is by inborn aptitude an engineer, he may already be revealing talent in the accents of his play.

By eight years the sand box has graduated from the back yard into the schoolroom. Here, under the influence of curriculum and culture the desert sand may blossom into an Indian village, or an Arab camp. The distinction between play and work dissolves into an educational project. And the project in turn is reinforced by the pressure of the schoolroom group and by the teacher. The child's play impulses thus are socialized.

But there still is scope for the more aboriginal type of undirected play, and we hope that the 8-year-old boy will not be prevented from

going to some hillside to dig himself a cave, or erect himself a hut planted upon the mother earth. These private ventures and contacts with Nature go deeper than a schoolroom project.

What a 9- or 10-year-old will do in this particular gradient of play cannot be predicted. As a child grows older, the Culture tends more and more to intervene, and determines even his extra-curricular activities. He may dig a tunnel, a fox hole, or a canal. He still likes to dig and to feel the earth yield to his hands. With his like-minded companions he builds a well-drilling machine,—a wooden derrick, a pulley, a sash cord and iron weight, and perhaps a wheel and axle to operate the rhythmic drop of the drill. With what triumph he sinks a shaft and pulls up the moistened earth in his tomato-can bucket! The play sequence of sand and mud and water which began before the age of two has come to higher issues.

In many fields of play, one could trace a similar developmental sequence, the patterns of play always conforming to the advancing patterns of maturity. A child's play often appears to casual observation to be so haphazard, so determined by chance environmental factors—what play-mates are available, what toys are at hand, what play space is provided—that it is easy to underestimate the strong developmental factors which underlie his choice of activity. Closer observation will disclose that deeply determined developmental trends often underlie this choice. Again and again, from child to child, do we find the same sequence repeated with increasing maturity: sand and water; doll and teddy bear; cars and wagons; tricycle and domestic doll play; dramatic play of store, hospital and school; reading; games; radio; bicycle; paper dolls; funny books.

There are variations based on individual and sex differences, and on cultural influences, but age is the basic factor. Children of high intelligence, accelerated beyond their years as measured by an intelligence quotient, nevertheless tend to remain true to their chronological age in many of their spontaneous play interests. This fact, itself, testifies to the basic significance of play in the dynamics of development.

In a more Utopian child-world we would doubtless make more room for free, unregimented play activities. There would also be more organized outdoor play, in which children might make spirited and rhythmical use of their large, fundamental muscles, through the medium of folk games, dancing, music, pantomime and dramatic games. Such group activity taps the deeper springs of personality which are not reached by sedentary and restricted indoor schooling. Such expressional play can bring about much needed improvements in body posture and motor control. It would have a beneficial effect upon the organization of the emotions. It surely would be preferable to the aimless physical activities of unsupervised and chaotic recess periods.

As our culture becomes more technological the psychological health and growth of children need increased protection. This protection requires a deeper understanding of the play interests of children, particularly in the age period from five to ten. For this is the period when we are in danger of introducing children too rapidly into our adult culture. We should have more faith in the simple, unsophisticated forms of play life, which keep the child closer to nature. Technology tends to use more and more technology in order to catch up with the pace which technology itself sets. Hence radio, comics, movies, and television for children. These devices have come to play a tremendous role in the recreation and pastime of the school child. They do indeed induct him into the civilization into which he is born, and they inevitably stir his elemental emotions as well as his phantasy. To that extent they serve the true functions of play. But they are a poor substitute for the more basic types of play which come from inner urges and which express the initiative and resourcefulness of the growing mind. Carried to excess at the expense of natural, oldfashioned (!) play, these recreational facilities lead to superficiality. Television will aggravate the present imbalance in play diet, if not offset by more active forms of self-expression.

So much for the general philosophy of play and its underlying principles. These principles suggest that we should give considerable scope to

the child's own spontaneous play enterprises. His play has a developmental logic which does not necessarily fit into our preconceptions. We must be tolerant toward some of his apparently illogical reactions. For example, you may enthusiastically give your boy a new and shining toy. There are so many different things that he could do with it. You can think of all of them; but if the timing of your gift was poor he may disappoint you with a very meager response. It may, however, be just the response that befits him and his maturity. Perhaps if the toy is put aside, he will come back to it with a wider range of response when he is older. Children themselves like to come back for a new contact with previously discarded play things, when they can use them again at a higher level. The sand-mill toy which had superficial attention at three or four years may be revived at six years with a mounting of new interest. Then there is the common error of giving too many toys all on one occasion, when spacing would work to everyone's advantage. With pets as with toys, good timing is important. Many a child has been given a dog when he was scarcely ready to take care of a goldfish, and might in fact, have had more pleasure in the latter.

Parents are sometimes worried about obsessive preoccupation with a single toy or with one kind of play, to the exclusion of others. Such obsessive interest is more common in boys. Girls are more balanced and diversified in their play preferences. At the age of five-and-a-half years a boy may be obsessed with the motion of his toy trains. At six years he may be obsessed with climbing. At seven years, characteristically enough, he shows a succession of intensified interests. At nine years he can hardly wait for school to close, so he may get back to his erector set. These obsessions have their own logic in the scheme of development. They are benign and probably beneficial seizures.

At another extreme a child's play is sketchy rather than obsessive; and exploratory rather than conclusive. He starts something,—a lemonade stand, a postal card collection, or a play hut; but he does not carry through and finish the job. A father, unfamiliar with the ways of child development, detects a weakness in such behavior; and sternly expresses

his disapproval. It is usually wiser to be patient with such beginnings. They are embryonic. They will come to fuller fruition at a later stage. One must also be patient with a certain amount of disorderliness. Unaided, the child may not be interested in completing what he has begun; he does not have the maturity of perception to see the whole. We can make concessions to his request that we do not molest his unfinished construction.

We can also make concessions to his so-called destructiveness, which may well be a form of constructiveness in reverse. Oftentimes a child shows interest in taking a toy apart long before he is able to put the toy together. A baby spills the contents of a waste basket before he is able to replace them. He delights in demolishing a tower of blocks before he can re-erect the tower himself. An older child may show a readiness to dismantle an erector construction well before he has the capacity to reassemble its parts. A wise father or older brother will encourage this kind of mechanical interest, because it actually represents a positive as well as negative form of workmanship. It is a preparatory stage.

When destructiveness becomes violent, and emotionally charged, it means that the child is not ready for the play materials with which he is confronted. He probably will adapt to more simplified situations. There may be personality or maturity factors which need consideration.

However, his unreasonable behavior does not necessarily denote either sadism or an incest complex. Even when he jabs a rubber doll in the stomach and tears out the rubber eyes, it does not automatically follow that these acts are symbolic. Among normal and relatively normal children play tends to be practical and experimental in its essence. Even in the play of phantasy, the child projects his private mental images in a practical spirit. He manipulates them in order to organize his concepts of reality, and not to deepen his self-illusion. Even his imaginary companions are amazingly serviceable devices, and so he uses them pragmatically,—until he is old enough to dispense with them. This is one more evidence that play has a positive role in the drama of development.

The role is many sided. Play is an outlet for obstructed and overflowing energy. It manifests exuberance in laughter, rollic and euphoria. Play is imitative, repetitive, or rhythmical in skipping, dancing, and dramatic expression. Play is psycho-motor exercise in running, jumping, tossing, hustling, balancing, and a host of gross and fine muscular activities. Play harks back to the past, in the emotional stirrings that accompany games of hunt, hide-and-seek, combat and chase, and in the quieter pastimes of exploring, collecting, hoarding, camping and caring for flowers, plants and animals. Play penetrates into the future, spurred by impulses of curiosity, experimentation, exploitiveness and workmanship. In highly gifted children this workmanship declares itself in resourcefulness, originality or even in genius. In all children play has a creative function. It serves to organize the abilities with which the child is endowed. In its supreme moments it reveals his individuality and his potentialities.

GROWTH GRADIENTS

§1. GENERAL INTERESTS

1 YEAR—Reciprocal nursery games as, "Where is baby?"

Gross motor activity.

Putting objects in and out of other objects.

Play with buttons attached to a garment.

18 MONTHS—Climbs; moves furniture.

Plays with pull toys, dolls, teddy bears, pots and pans, balls, hammer toy.

Plays with sand, fills and empties containers, likes to pour it.

Blocks: carries around room, pounds together, builds tower of three or four.

2 YEARS—Feeds and toilets doll, teddy bear; takes them for rides in carriage.

Plays with sand and or water, filling dishes and then emptying them.

Pushes wagon or carriage.

Plays with little cars, screw driver, egg beater, little objects (pebbles, beads, bottles).

Some painting, finger painting, play with clay.

Blocks. Lines them up or uses them manipulatively to fill wagons. Likes colored blocks or blocks which fit into each other.

Christmas: chiefly the tree is important. Some interest in presents.

GENERAL INTERESTS

- 2½ YEARS**—Domestic play with doll or teddy bear and housekeeping toys.
Plays with cars or wagons.
Sand and water play, makes pies and cakes with sand or mud. Tea parties with mud cakes and water tea. Soap bubble play.
Paints with some design. Finger paints.
Makes pies or cakes of clay.
Blocks: vertical and horizontal building; names structures, may use large blocks as coal and lumber.
- 3 YEARS**—Rides tricycle; pushes wagon, fire-engine or train.
Swings, plays on jungle gym.
Domestic play (both girls and boys) with doll, teddy bear and household equipment.
Plays with imaginary playmates.
Plays house, store, train with other children and simple equipment.
Colors with crayons as well as paints. May draw simple figures.
Plays in mud or sand: makes cakes, pies, roads, tunnels. Combines with other materials.
Blocks: builds structures, using a diversity of shapes and sizes. May combine blocks and train. Enjoys construction more than play with finished product.
Christmas: interest in Santa Claus; in presents he receives.
- 4 YEARS**—Prefers to play with other children. Dramatic play of house, store, train, hospital involves costumes and "props." Combination of real and imaginative.
Rides tricycle; climbs, does "tricks."
Plays with imaginary companions.
Draws, paints, colors.
Admires own products whether of clay, paint, paper, blocks.
Blocks: makes detailed constructions. Combines with furniture for dramatic play.
Builds cooperatively with others.
Christmas: asks for specific presents, then brags about size and amount. Strong interest in Santa Claus.
- 5 YEARS**—More independent play and likes to play indoors or out according to season or weather. **Likes to have an adult nearby.**
Much play centers around a house. Builds house with large blocks or with draped furniture. Plays house imitating adult activities.
Plays with dolls using them as babies.
Child runs, climbs, swings, skips, jumps, dances.
Rides tricycle, pushes cart.
Tries roller skates, jump rope, even stunts.
Uses sand in making roads, transporting it in cars.
Imitative play: house, store, hospital.
Paints, draws, colors, cuts, and pastes, and does puzzles.
Copies letters and numbers.
Games of matching pictures and forms.

PLAY AND PASTIMES

Builds with blocks, large and small. Likes to copy designs with blocks.

Christmas: asks for specific presents. May request things by letter to Santa Claus. Anxious to tell what he has received. Strong belief and interest in details about Santa Claus and in visiting him.

Girls Doll play, playing house, dressing up.

Boys Blocks, tools, cars and trucks, war games, mechanical toys.

6 YEARS—Elaborates and expands five-year play interests.

Mud, sand and water play.

Games of tag, hide-and-seek; stunts on trapeze, on rope and on tricycle.

Ball play: tossing, bouncing throwing.

Rough and tumble play, climbing, swinging.

Interest in roller skates, double runner ice skates.

Simple carpentry: hammering, sawing.

Table games with cards ("Go Fish"), anagrams, dominoes, and puzzles.

Paints, colors, draws and uses clay. Cuts and pastes.

Collecting odds and ends.

Printing letters to spell real words.

Games of oral spelling or oral numbers.

Imaginative play: pretending to be a horse; pretending furniture is a boat, etc.

Blocks used imaginatively and constructively.

Christmas: may want specific toy (doll or train) and be disappointed if it is not received, but also wants *many* presents. Boasts and brags about how many received. Strong interest and belief in Santa Claus.

Girls Doll play elaborated with dolls' accessories: clothes, suitcase, furniture.

Dressing up in adult clothes.

Playing school, house, library.

Boys Tinker toys and simple erector sets.

War games, cowboys, cops and robbers.

Digging holes and tunnels and simple activity in garden.

Interest in transportation using wagon, trains, trucks, airplanes and boats.

7 YEARS—More intense interest in some activities, fewer new ventures.

Has "mania" for certain activities: guns, funny books or coloring.

More solitary play.

Some play with mud, and digging, and some interest in garden tools.

Tricycle usually discarded; some ride bicycles.

Magic and tricks. Jigsaw puzzles.

Collecting and swapping cards, bottle tops, and stowing away stones and bits of this and that.

Interest in swimming often strong.

Plays library, train, post office with elaborate paraphernalia.

Rudiments of ball play: "catch," batting with soft ball.

Christmas: very great disappointment now if does not receive a requested toy.

Writes letter to Santa Claus with list of desired toys.

GENERAL INTERESTS

Girls Cutting out paper dolls and their clothes. Doll play may decrease. May "invent" dresses for dolls.

Playing house which includes dressing up in elaborate adult costumes.

Playing school with emphasis on teacher role.

Hop scotch and jump rope, roller skating, ball bouncing.

Boys Active outdoor play of running, wrestling, climbing trees.

Carpentry, especially sawing. Like to make Christmas presents.

Rigging things from cereal boxes, etc.

Make paper planes and shoot them; make model airplanes.

Cops and robbers, commandos, gun play, war play.

Building and playing in tree houses, forts, huts and tents.

Beginning interest in chemistry, telegraphy, navigation.

8 YEARS—Variety of play interests. Prefer companionship in play (adult or child).

Games of all kinds played indoors or out. Differentiate work from play.

Table games of parchesi, checkers, dominoes, card games. Jigsaw puzzles and map puzzles. Scorns too simple games. May make up own game with own rules.

Dramatic play of giving shows. Arranges and produces these shows.

"Gadget" age. Likes to have variety of things and tries to make something of them.

Collecting, and arranging of collections.

Beginning interest in group games such as soccer or baseball with supervision.

Unorganized group play of wild running, chasing, wrestling.

Beginning of secret clubs, usually short-lived.

Seasonal interests: rowing and swimming in summer; skating, sliding, skiing in winter; playing with marbles, kites and tops in spring.

Boys and girls beginning to separate in play.

Christmas: has innumerable ideas of what would like for Christmas and wants are now intense. Interest in how many presents received. Do not want useful things.

More interest than earlier in giving presents.

Girls Doll play and playing house, stressing more complex adult relationships. In make-believe play, child requires complete attention of companion.

Paper doll play: collects large number of dolls and doll clothes. Cuts out and tries on dresses. Likes to have them admired. Simple dramatic play with dolls involving much verbalization. Likes nooks with many different dolls.

Boys Beginning to utilize tools to fix things around house; make mixtures with chemistry set. Use telegraph to communicate.

Continue to work with airplane, train and boat models.

War games, cops and robbers, commandos.

Electric trains and movie projectors.

9 YEARS—Plays and works hard and is apt to overdo to point of fatigue.

Busy with own activities. Plans what he is going to do.

Individual differences stronger: some read and listen to radio more; others play outdoors more.

PLAY AND PASTIMES

- Some former interests may be dropped while others are intensified.
- Coasting a favorite outdoor sport, but also marked interest in baseball, skating, swimming and other sports.
- Interest in organized clubs such as Cubs and Brownies.
- Spontaneous clubs are short-lived. Stress special interest in club house or hide-away.
- Collecting of stamps, minerals, etc.
- Hikes and goes for walks in woods.
- Drawing maps, making lists of collections. Writing "business" letters in response to radio advertisements or from catalogues.
- Playing more complicated table games.
- Some have animals which they are supposed to care for.
- Christmas: makes long lists of presents, not expecting to receive all. May understand that cost of presents may be too high or that they may not be procurable.
- Interest in number of presents and may classify them by size or type.
- Interest in trimming own tree and in making ornaments for it. May do own Christmas shopping, buying presents for family and friends. Interest in what they give others and how much they spend for each.
- Girls* Paper dolls used in dramatic play. Identify themselves with dolls, playing out elaborate dramas. Like books with fewer dolls and more different costumes. Or may enact entire day's routine in doll play.
- May show interest in manipulating puppets.
- Put simple abilities in sewing and cooking to practical use.
- Boys* Constructing with mechano and erector sets and in work shop. May work with material for long period on a planned project.
- Rough-housing and wrestling. Some are interested in boxing or gym lessons.
- Beginning interest in bowling and horseshoes.

§ 2. READING

- 18 MONTHS—Turns pages of a book.
- 2 YEARS—Likes to hear rhymes.
Likes tactile books.
Looks at pictures.
- 4½ YEARS—Likes to look at books alone; or to fill in last word as adult reads.
Likes rhymes or short stories about familiar subjects.
Enjoys books about transportation or animals: *Saturday Walk*, *Ask Mr. Bear*.
- 3 YEARS—Longer listening span.
Likes repetitive stories of familiar experiences, or imaginative books based on people and animals: *Caps for Sale*, *Little Black Sambo*.
Likes riddles and guessing games.
Stories must be re-read and re-told word for word.
Looks at books and may "read" to others or explain pictures.
Likes to look at colored advertisements of familiar objects in magazines.

4 YEARS—Listens to long stories and poems.

Likes nonsense rhymes—*Nonsense ABC*; humorous stories—*Junket is Nice*; exaggeration—*Millions of Cats*; alphabet books—*The Jingling ABC's*; stories of function or growth of things—*Mike Mulligan and his Steam Shovel*, or *Tim Tadpole and the Great Bullfrog*; or information books.

5 YEARS—"Loves" to be read to and shows preference for certain stories which he likes to hear over and over.

Likes poetry, stories of animals who behave like human beings, holiday and seasonal stories. (E.g. *Winnie the Pooh*; *The Country Bunny*.)

Likes to have first grade primer about children in play activities read to him. *Comics* May puzzle out pictures in newspaper comics. May like to have some comics read to him. Slight interest in "funny books."

6 YEARS—Likes to be read to. May read familiar stories from memory. Likes to hear stories about himself.

Beginning to recognize words.

Less selective in choice of stories and may be disturbed by unpleasant event in story.

Likes poetry (as of A. A. Milne), stories about activities of children.

Comics Rudimentary interest in comics and comic books. Likes to try to read or to have them read to him. Interest general, but some have particular favorites.

7 YEARS—Some become inveterate readers and even want to bring books to the table and read as they eat. Others like to be read to while at play.

More individual reading interests: books about children, animals, nature, the elements. Boys like books about the army and navy, airplanes, and electricity. Likes fairy tales, myths and legends, poetry. (E.g. *Alice in Wonderland*; *The Hobbit*.)

An interest in going to the library for books.

May enjoy a children's magazine which suggests activities which they may carry out.

Comics Much interest in comic books. Reads these himself. These books become a "passion" with some. Child buys, collects, barterers them. Has definite favorites: daily adventures of animals, of ordinary people or adventures of supermen.

8 YEARS—Variable enjoyment in reading. Girls may read more than boys.

Interest in reading stories such as childhood classics. Books of travel, adventure, geography, primitive times and Bible stories.

Still enjoys books about children, animals, the elements, fairies.

Expanding interest in books about far-away or long-ago people.

Delights in the humor in stories—people put in the wrong position. (E.g. *Mary Poppins*.)

Enjoys looking at catalogues and at adult magazines as well as own literature.

Comics Continued interest; now buys, collects, barterers, borrows, hoards. Likes animal, adventure and some "blood and thunder" comics.

- 9 YEARS—Individual differences: some are omnivorous readers who secure books from the library weekly; others do not read at all.
Reads Junior classics. Re-reads favorite books.
Many like a book with several stories in it. Likes mysteries and biographies.
Increasing interest in magazines.
May still enjoy being read to on occasion.
Comics Interest reaches a peak with some, beginning to wane in some. Some have a "passion" for funny books. Reads "any kind." Buys, swaps, borrows and hoards them.

§3. MUSIC, RADIO AND CINEMA

- 18 MONTHS—Listens to radio music; dances to it.
Turns knob of radio himself.
- 2 YEARS—Dances to radio or phonograph music.
Prefers phonograph to radio because it repeats and he can watch it turn.
- 2½ YEARS—Continues to prefer phonograph to radio. Likes to watch and to repeat some one piece.
Likes to run, gallop, or swing to music.
- 3 YEARS—Likes to watch and listen to phonograph. Little interest in radio. Can recognize several melodies. May have favorites.
Gallops, jumps, walks, runs in time to music.
- 4 YEARS—Still prefers phonograph to radio. Some can run phonograph themselves.
Likes to experiment with the piano.
A few can sing songs correctly; can identify simple melodies.
Likes to dramatize songs.
Occasionally listens to children's programs on radio and may be susceptible to admonitions delivered on these programs.
- 5 YEARS—May pick out tunes on the piano and learn to play a few familiar, simple melodies.
Prefers phonograph records to radio. Likes to play them over and over and to sing or dance to them.
Some listen to scattered radio programs. Like a combination of music and talking.
May like the advertising jingles on the radio which are repetitive.
A few listen to one or two special programs, favoring those directed to very young children.
Some have attended an occasional child's movie.
- 6 YEARS—Enjoys own phonograph records.
Radio becoming a great favorite with most. Spends several hours a week listening.
Likes talking programs with some music.

Most have one or two preferred programs to which they listen regularly; prefer adventure stories of children.

Anxious not to miss his particular programs. Asks, "Is it time for my program?"

Likes short home movies about nature, animals or his own early life.

Attends cinema occasionally. May become restless, close eyes or cry.

7 YEARS—Craving for piano or dancing lessons. Likes to use various percussion instruments.

Radio now a part of daily diet. Dislikes to miss set programs.

Many listen to late afternoon programs of adventure and shooting. Beginning of interest in Westerns. Likes to have radio turned on loud.

Slight interest in news broadcasts; little in music.

Some attend cinema weekly. Others occasionally.

Likes musicals, dancing, singing and animal pictures. Some like adventure movies while others are disturbed by them. Dislikes love stories.

8 YEARS—Less desire to practice on piano. May like to change a passage in a piece to one of own invention. Likes to have an audience as he plays. Also enjoys duets. Marked interest in radio programs. Most listen to several regular programs each day and do not like to miss these.

Likes late afternoon adventure stories, slap-stick comedies, mysteries, quiz programs and dramas of domestic life.

Frightening programs may influence dreams. Can turn radio off if it becomes too frightening.

Great interest in cinema. Most attend weekly, usually on Saturday.

Boys like action pictures: Westerns, baseball, war. Girls like musicals.

Both like animal and adventure stories and those about children. All dislike love stories.

If movie is too exciting, close eyes, hide heads or go to back of theatre.

9 YEARS—Really applies himself in practicing music. Touch is lighter with girls but surer with boys. Enjoys executing staccato or legato notes.

Beginning to be interested in composers.

Listening to radio is constant from late afternoon to bedtime with some.

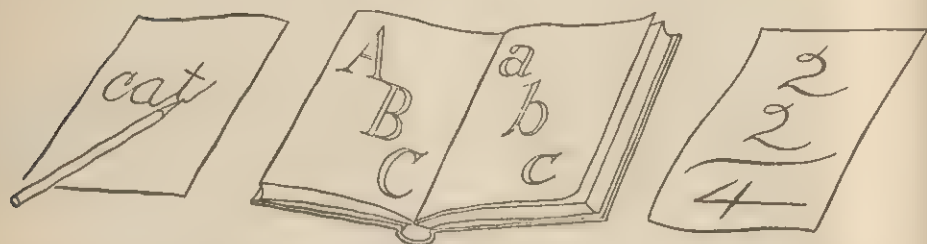
Knows time and station for programs. Likes teen age serials; detective, mystery, quiz, information, and adult comic programs.

Individual differences with cinema. Some go to weekly cinema, others go on occasion. May want to see one picture several times.

Girls like musicals. Boys like action, war, cowboy, Indian pictures.

Both sexes like animal stories and dislike love stories.

SCHOOL LIFE



Why do children go to school? Because our civilization has grown so complex that the home alone can not transmit to the child the culture which the race has prepared for him. The home is still the primary cultural workshop in which he learns the alphabet of civilized living; it remains an extremely important workshop even in the years from five to ten. But the accumulated inheritance from past and present is so vast that teachers and schools and pencils and books have become a social necessity.

SCHOOLS ARE FOR ACCULTURATION

A universal public school system, as ideal and as fact, is the most significant achievement of our democratic culture.

And of what does this culture consist? It consists of ways of life (man-

ners, customs, rules and rites); of things material (houses, roads, farms, factories, markets); of property (real and personal, moneys and certificates); of laws and governments; of arts of communication, and self-expression; and endless records,—printed, graphic and otherwise of the accomplishments of mankind.

Schools are devices and teachers are agents designed to induct the growing child into this immense, moulding heritage. But this heritage is no mere hand-me-down from the past. It is something organic which must be lived into. The school is itself a product of culture, and a workshop in which the child should find himself and enjoy himself. It is easy to overstress the idea that the child is a "candidate" for our culture. He is in truth a *member* of the culture. And the school should grant him full membership in terms of *his* developmental past and *his* developmental present. If we think too much of future values we shall squander the ever-present present. Children wisely hold the present dear.

For this reason we have labelled this chapter *School Life*. We believe that the child is entitled to a generous measure of life, liberty and the pursuit of happiness during the very years in which he is in school,—the years from five to ten.

Our task, then, as adults, is to interpret school going children, not only in terms of the official course of study, but in terms of their psychological natures and their growth needs. How do the children themselves react to the school curriculum, to the school day, and to the teaching methods? That is the crucial consideration. The curriculum should not be envisaged as blocks of academic requirements, but as areas of educational opportunity corresponding to the major facets of our culture. These facets correspond to three culture areas. We may well think in terms of these three Culture Areas rather than in terms of the time honored 3 R's.

THREE CULTURE AREAS

1. *Language Arts* (conversation; drawing; writing; spelling; reading; listening; looking).
2. *The Sciences* (mathematics; natural science—physics, chemistry, biology; social science—geography, history, civics).
3. *Personal-Social Participation* (creative self-expression; arts and crafts; dancing, poetry, invention, technology, engineering; pre-vocational skills; social cooperation and leadership; aesthetic, ethical and spiritual appreciations).

These three cultural areas are more comprehensive than the 3 R's to which the old fashioned red schoolhouse was so exclusively dedicated. The culture of today comprises a vast array of interrelated knowledge, skills, attitudes, values, goals. It cannot be conveyed in neat bundles of subject matter; it must be assimilated in organic bits of experience which correspond to the maturity traits of the individual child. We can, if we wish, dispense even with the noble word education; *for education in these modern days must be reconverted into a process of acculturation.* The child must learn to carry the culture into which he is born.

The schools are his second birthright. He comes into his biological endowment, that is, his ancestral inheritance, through the processes of maturation. He comes into the social heritage of culture through the process of acculturation. The two processes interact and interfuse, but maturation is fundamental.

A sketchy outline of the progressive maturational steps by which the child from five to ten enters the three major cultural areas should furnish us with a better understanding of his characteristics, both as a novice and as an enrolled member of his culture. A year by year summary of the advancing school grades will serve our purpose.

The child of five has already had a vast amount of cultural experience and participation. A companion volume (*Infant and Child in the Culture of Today*) was necessary to describe his development during those first four formative years. His acculturation began at his mother's

breast. In quick succession he advances to her lap, to crib, high chair and pen; to porch, perambulator and play yard; to the junior, middle and senior grades of the nursery-school. He has assimilated many of the folkways, manners and customs of civilization. He is toilet trained, he wields a spoon and even a tooth brush, he washes himself, he goes on simple errands; he talks freely: he can count to one, two or three; he makes many a foray into his widening world. In the next five years he makes deep penetrations into the fundamental cultural areas. At age five he is ready for kindergarten.

THE SCHOOL GRADES IN DEVELOPMENTAL SEQUENCE

KINDERGARTEN. FIVE is a kind of finishing age which brings to a conclusion the pre-school years. We do not think of the 5-year-old as a school-beginner, but rather as a completed pre-school child, who is well organized within his limits, without, however, being maturationally ready for the first grade. Unemotionally he tolerates separation from home, and easily re-adapts his home behavior to the simple demands of the kindergarten. He interprets these demands in terms of his own home life. Kindergarten is a kind of extra-mural home. School does not yet mean the novel and exciting transition to a new world, as it will a year later.

Nor is the kindergarten truly a preparatory course for the first grade. Successful adaptation to the kindergarten does not always augur a comparable adjustment to the first grade. Discontent in the kindergarten may denote a rapidly maturing pupil who will make a successful adjustment at school entrance. Occasionally a child adjusts better at kindergarten than at home and vice versa. But generally the children enjoy their kindergarten life.

The child likes his teacher, obeys her as a matter of course, and quotes her as an authority. His relationship is matter of fact and pleasant, and much less personal than it will be later.

In the *language arts*, the 5-year-old is relatively facile and well balanced. He not only likes to talk, he likes to listen; and loves to be read to time and time again. He also looks at books alone and may pretend to read. He may recognize some of the capital letters, pick out familiar words on a page or placard and indulge in a little simple spelling. But he is probably more alert with his ears than with his eyes.

He is beginning to use his hands languagewise, to delineate figures and simple dramatic episodes, to trace, to paint at an easel, to underline and to draw capital letters, and perhaps, to print his own name.

In the *sciences*, he shows a dawning interest in meanings. He has reached that stage of human culture when digits meant digits; and so he counts the five digits on his hand. He may count to ten; but his concepts are typically within the domain of five. Finger counting should not be denied him now or later. It is as natural as finger feeding once was.

His intellectual interests are varied rather than inquisitive and critical. He does not distinguish readily between fantasy and reality. He accepts "magic" as an explanation. He is fond of stories in which animals act like human beings. Nevertheless as a constant talker and listener he accumulates abundant simple information in the areas of natural and social science.

His *personal-social participations* reflect the organization of previous experience somewhat more than adventurous expansion into the unknown. He foregathers in fluid groups of two, three or four in his kindergarten play; he dramatizes familiar events; he dresses up in adult clothes. He works creatively with paint, clay and blocks, usually starting with a goal idea and finishing with a recognizable product. Socially he shows an inclination to establish friendships; and he can carry through on a group project from one day to the next. He takes an interpersonal as well as personal pride in achievement; for he likes to take home his kindergarten handiwork, and to keep the things that he has made out of his own spontaneity in response to the pressures of culture.

FIRST GRADE. The psychological climate changes when the child becomes truly a school-beginner; when he crosses that threshold which

leads to books, blackboards, attendance records, classrooms, rules and regulations! The transition is bound to produce stimulating tensions and thrills; and also confusions; because the organism itself is undergoing transformation. Often the methods of acculturation, which the school awkwardly attempts, come into conflict with the maturational changes. When both school and child are awkward, the end results are awkward. Many concessions should be made to the school-beginner.

He is a poor subject for regimentation. His whole growth complex is "loosening," groping and thrusting to make new contacts with the multifarious world. He has lost some of the solidarity and assurance which he displayed at five. In his eagerness he copies new capital letters and also small letters; and he makes more reversals than he did formerly! This does not mean that he is slipping, or that he is fundamentally more unstable. But he learns to detect his errors and his reversals. Many children learn best through their errors. This then is no time for rigid insistence on accuracy. Errors can be good because they are approximations. Even in arithmetic we should be more lenient with such good errors. And because the 6-year-old is in such a promising state of many-sided ferment we should not put all our pedagogical eggs in one basket.

There is no single method of learning or teaching reading. There are multiple methods,—visual, auditory, manual and phonetic, which should be used freely and variously and separately and in combination to suit the fluid psychology of this school-beginner, and to do justice to the individual differences which prevail among all school-beginners.

It is not surprising then that the first-grader works in spontaneous spurts and in short shifts, that he is somewhat expansive and diffuse, that he intermixes impulsive play and earnest learning. He also intermixes home and school loyalties and attachments. By the same token teachers and parents intermix their tensions and blame each the other for shortcomings. How tranquil and beneficent in comparison was the kindergarten where work was play and play was work, and school was home.

Parents who would now insist on systematic thorough drill in fundamentals (with discipline and no nonsense), might easily disturb the process of acculturation in the name of downright education. The child

is not ready for such rigorousness. He is ready for the kaleidescopic activity programs which progressive teachers have found suitable to his transitional stage of growth.

The various behavior patterns which he displays in the three cultural areas reflect his distinctive psychology. A few will be mentioned by way of illustration.

There is a burst of activity in the *language arts*. The school-beginner often speaks with vehemence and aggressiveness. He may temporarily stutter at six, although he did not do so at five. He likes to use big words; and he is a spontaneous commentator on his own activities and those of others. ("Oh, I'm going to go ahead and draw." "John, what are you making,—gosh!")

His drawings and picture writing are becoming more realistic. He renders the leg of a man in two strokes rather than one, to represent a second dimension. He can usually print most of the alphabet. He writes numbers from 1 to 12 or to 20, with frequent reversals and irregularities. He picks out single words or combinations of words, and is beginning to master the mechanics of holding a book and turning a page. A few children can read sentences. Abilities, of course, vary with individuality and social pressure. The most natural and universal reading interest is that of listening. The first-grader likes to be read to. He also likes to read pictures and labels; he is beginning to explore comics and illustrated books.

The Sciences. The first-grader is advancing in his mathematics. He is interested to make simple measurements using ruler, tape, yardstick, quart, spoonful, etc. He is beginning to label quantities and series with numbers: 2 of this, 4 of that, etc. He reads as well as writes numbers up to twenty; adds within the range of ten, and subtracts within the range of five.

Through care of school pets, plants and flowers, he acquires elementary notions of natural science,—growth, nutrition, cleanliness, weather, seasons, etc. Through the everyday experiences of school going, he becomes acquainted with social relationship between home, school and

community; between parents, teachers, sibs, strangers, friends, neighbors, etc. This elementary social science is too complex for lessons and curriculum; it comes through actual life situations, informally and incidentally. In life-centered schools, such acculturation is more fundamental than the academic fundamentals.

Personal-social participation lies at the basis of activity programs, and schoolroom projects. The 6-year-old is at once an eager ego, and a meddling, social thruster. He cannot be organized by lesson setting instruction. But given opportunities for creative self-expression and appreciation, given a diversified menu of brief tasks which call for skill, given liberal opportunity to fumble, stumble and make errors, he will, in a social milieu, find the cues that will set him on true course.

SECOND GRADE. The first-grader is a school-beginner,—eager, spontaneous, expansive. The second-grader,—to draw a contrast, is a school going pupil, earnest, assiduous and somewhat channelized. He has a new holding-on quality. Whereas a year ago he worked in short, shifting spurts, he now selects a groove within which he exercises a special skill. He even tends to overdo his practicing, as though he did not know how to stop once started. With the teacher's help he is diverted to something else where he again displays a characteristic repetitiousness. This trait is so marked that he is generally reputed to be a good learner.

There are, of course, individual differences, but the mechanical, learning attitudes are so prevailing that a volatile and highly spontaneous type of child is likely to be more conspicuous than he would be in the first or third grade. Within limits the second-grader takes kindly to drill as an individual and in small groups.

He wants to be correct. This is why he consumes so much rubber, erasing what is wrong, or what he thinks he might improve. He likes ruled paper to write on, which is further evidence of a growing interest in form and performance. However, he works best in delimited areas. He does better with single sheet work than with a more elaborate workbook. He functions best when the environment is suited to his limita-

tions. At nine years he will be able to make more adjustments by drawing on his own resources. At seven years he accepts, likes to know in advance what comes next, and does not readily make transitions from one activity to another.

This lack of pliancy may make him seem humorless, and leads to hackneyed jokes. It also makes it difficult for him to take compliments in praise of his school work. He identifies himself in a primitively grave manner with his printed name, and is much impressed by mail addressed to him. His orientation to school life is greatly influenced by the teacher-child relationship.

These emotional characteristics combined with his bent toward mechanical learning reflect themselves in the general atmosphere of the second grade schoolroom. A definite advance in intellectual maturity is reflected in the achievements in the three cultural areas.

The *language arts* show a marked increase in the capacity to communicate. The second-grader uses a telephone for social conversation. His sentences are more thoughtful and reflect a growing degree of abstraction expressed in analogies, opposites and similarities. He is beginning to use a child's dictionary.

Writing lags behind speech. It is ordinarily large, awkward and uneven in size and irregular in position. It is in a labored label stage rather than at a fluent, cursive stage. Half the children may prefer printing to script. Many can write their signature; they are beginning to use a small pencil.

Reading is in advance of writing. Single words are recognized rapidly and accurately. Familiar sentences are read with ease and new words are mastered through context. But language is still primarily assimilated through ears rather than eyes; and true to his mechanical learning tendencies, he often reads mechanically with only secondary regard for meaning. This pleases him; perhaps it should please us, for the time being.

Some children, however, are "great readers," and read to themselves for an hour or more at a time.

In the area of *the sciences*, the second-grader reveals a more discriminating interest in measurements and values. He identifies and comprehends the values of the common coins. He is beginning to tell time to the minute. He counts to a hundred, by ones, fives or tens. He adds within twenty, subtracts within ten, and uses a few very simple fractions.

Natural and social science information is acquired incidentally to projects, excursions and the celebration of holidays. The aquarium, the pet turtle, the weather calendar and an ever changing schoolroom museum become centers of interest which organize knowledge in fields of nutrition, biology, geography. These interest centers are still more important for the organization of attitudes toward nature and man's relations to nature.

Attitudes also are organized (often unconsciously) through the *personal-social participations* which the informal and planned activity programs entail. The life situations call forth latent abilities of leadership, of cooperation and inventing, of creative self-expression and group-expression in the arts. Even though this expression may have the crudeness of immaturity, clever teachers will manage to relate the personal-social behavior of the children to the culture of today,—to the conditions of the children's own homes and life interests. Through personal experience, rather than rote learning, the child is acculturated.

THE THIRD GRADE. Speaking comparatively, and one cannot do otherwise when dealing with growing school children, the third-grader is less channelized and more expansive than the second-grader. He is less mechanically concerned with practice for its own sake; he is also interested in associated meanings. Being less deeply immersed in himself and in the immediate environment, he gives more attention to relationships of cause and effect. He is more aware of his school mates both as individuals and as members of the same school grade.

These new maturity traits reflect themselves in the attitude of the third grade teacher and the atmosphere of the schoolroom. She is able to manage the grade as a total group, because the children enjoy work-

ing together as a whole group. They make little distinction between work and play, and are adaptable to shifting demands. They generally like all subjects of the curriculum equally well. They bring home good tidings about their life at school. Parents are gratified to see them so well adjusted.

Third-graders are more articulate with reference to their experiences and to their own mental processes. The teacher is more aware of how their minds operate, which eases the tasks of teaching.

The *language arts* reflect this increased articulateness. The third-grader converses almost as freely as the adult, not eschewing some slang (or mild profanity), exaggeration, and elevation of voice to suit emotional tensions. Good pronunciation and good grammar usually have been achieved.

The art of fluent penmanship, as a motor skill, is far from mastered, but the intellect may be equal to the use of punctuation marks, capitals and the composition of a simple letter. Reversals in writing are rare; but neatness, modulation of size, spacing and alignment do not measure up to good intentions. Great variations in style of writing are to be expected from child to child. Some children, especially girls, request to write cursively at seven. Some, especially boys, prefer a manuscript style.

Spoken language is far more fundamental than written language. With the great increase in powers of speech, it is not surprising that the third-grader enjoys oral reading, that he can tackle new words by phonetics as well as context. He may also be so interested in reading as a form of communication *to him*, that he takes new pleasure in silent reading.

The greater fluidity in the mental processes of the third-grader manifests itself in *the sciences*. His arithmetical sense is less stereotyped; he can break up quantities and series into fractions and simple proportions. This leads to the elementary insights of multiplication and short division. (The younger child's mind may be too "mechanical" for such insight.)

Measurement means more. He can lay ruler and tape against the four walls of his schoolroom. He can keep a weather calendar and note the effects of weather and season upon plants, animals, and men. He distinguishes between the passive movements of things inanimate, and the spontaneous movements of things living.

He makes a more rational approach to nature, to foreign peoples and strange lands. He differentiates with increased awareness between fantasy and reality, and begins to verbalize ideas and to formulate problems. All this is done at a very elementary level, but it denotes a real advance in the academic career of our school child. He is acquiring a modern scientific outlook.

It will be a socialized outlook if linked with *personal-social participations*. The third-grader is in an expansive phase of development, when his intellectual nature seeks knowledge and when his emotional nature seeks rapport with the widening world. As always, attitudes are organized through personal experience, which can come only through concrete extensions into community life,—through drama and creative art, through puppetry, field trips, radio and screen. Indeed a roomful of lively third-graders are none too young to tackle as a group project the writing of a motion picture script which will document or interpret some phase of the culture in which they live.

FOURTH AND FIFTH GRADES. As the kindergarten child epitomizes the mental growth of the first five years of life, so the fifth-grader consolidates the development of the years from five to ten. He has himself well in hand for one so young. The maturity traits of self-dependence and of *savoir-faire* are especially marked in well organized girls. Girls of this age are nearer to adolescence than are boys, and nearer to the wisdom of adult years. In the interests of brevity we shall characterize the fourth and fifth grades in general terms; but it should be noted that sex differences now begin to count heavily, and make themselves increasingly felt in the reactions to school life.

The fourth-grader is no longer a mere novice at school work. He can

set his mind to a school task, and he can take a school task home. This is the grade when home work begins to be effective and meaningful.

The fourth-grader works well as an individual. He rather likes written work; and once embarked on a school exercise he tends to practice and repeat in a manner somewhat reminiscent of the second-grader. At a higher level he is perfecting the school skills which will be so important in the next grade. He takes readily to school methods which put a premium on efficiency and preparation for promotion.

The typical fifth-grader is less concerned with training for skill than with application of skill in the solution of problems. He likes to use his intelligence. Having mastered his intellectual tools he is more interested to put them to use. He seems less driven by time and the urgencies of school. He shows a better command of time and space; knows where he is at; makes more modulated adjustments to imposed demands. Even his voice is more modulated and he shows a capacity for self-criticism which makes for a realistic and factual approach to school tasks. He is ready to work by the clock.

The *language arts* reflect in the fourth and fifth grades a more subtle use of words. Vocabulary grows not only in size but in discriminativeness. Fine distinctions are made in characterizing emotional as well as physical qualities. Language is used as a tool, and somewhat consciously when he voices criticism of the actions of others.

The printed word is also used more as a tool and a device. In the fourth and fifth grades the child learns to use the dictionary more systematically, to recognize diacritical marks, to make simple outlines and to consult index, glossary and table of contents. He also learns how to skim for thought and to search for the main idea of a story.

Writing, as a motor skill, is under relatively good control. Penmanship becomes smaller and uniform. It begins to take on a mature aspect and individuality of style. The elegances of calligraphy will come with adolescence.

Writing as a means of communication comes into its own. In the fourth and fifth grades children develop a sentence sense, and to some

extent a sense of paragraph as well. They develop ability to write brief stories, letters, thank-you notes, invitations, notices and advertisements. The language arts enable them to penetrate more deeply into community life.

The sciences assume an increasingly important role. The child extends his arithmetic skills and computations in common fractions, decimals and long division. He puts his skills to increasing use. Arithmetic becomes truly mathematics, which he applies to practical problems. He builds up tables of measure,—liquid and dry, linear and avoirdupois, time and money.

In the fourth and fifth grades there is a definite advance in critical and abstract thinking. The child is able to define abstract words like pity and curiosity. He acknowledges natural origins and natural processes in the physical and organic world. He is likewise more reasonable in the interpretation of social relationships. He worships heroes, but he acquires through history and geography a dawning sense of social evolution, and of the inter-dependence of peoples.

Information and attitudes are kept in good balance through *personal-social participations* and applications. When he utilizes his mathematics to keep accounts, to record the height of a growing bean stalk, to graph changes in temperature, and to chart the course of a shadow, he brings himself into social relationship with the life of the community as well as of the school.

Through field trips, through a collecting hobby, by neighborhood surveys, and by studies of plant and animal life, he begins to sense something of natural laws and their effect upon his own life. Similarly he learns about our technological culture, through more or less direct contacts with industry, aviation, transportation. During the fourth and fifth grades, the creative arts and crafts continue to serve a high social function. Through drawing, design, decoration, painting, modelling, mechanical contrivance, etc., the pupil not only clarifies his own ideas and feelings, but relates them to the social order. The complex process

of acculturation depends upon a progressive organization of factual information and of attitudes formed through actual experience.

During the high school years the child, now youth, makes idealistic projections to encompass the culture which presses upon him more closely than ever before. The prerequisites for a favorable orientation are laid down during the elementary grades, in the years from five to ten.

HOME AND SCHOOL RELATIONSHIPS

To see the school grades in developmental sequence is to see them in perspective. Perspective relaxes tensions; it reduces crises. Teacher and parents alike are so absorbed by their immediate responsibilities that they lose sight of the overall, self-corrective trends of child development. A "failure" in spelling, a "careless" arithmetic paper, an inverted figure five, a lapse in obedience,—are magnified all out of true proportion. Report cards are read, and often they are filled out, with excessive gravity. They subject school, child and parent to unnecessary misjudgments and emotional reactions. The whole procedure of classification and promotion rests too heavily on the idea of competition. We can not fully humanize elementary education unless we consistently adopt a developmental point of view, which clarifies the relativities of failure and success. Time and again we must ask the simple question, *"Why does the child go to school?"*

When we view the school child in developmental perspective, we realize at once, that his whole school life is affected by his maturity level and by his individual growth pattern. The fact that he was born in December rather than June may have a decisive effect on his status in kindergarten. A difference of six months in chronological age or of developmental age may radically change his adjustment to the first grade. Obscure, but none the less real, retardations in the maturity of his eyes and his oculo-motor muscles, may account for his reading difficulties. The unreasonable exactions of the curriculum may be the source of his attitude toward arithmetic. The fatigue of a double ses-

sion, or the teasing of a bully on the way home from school may bring about amazing personality reactions. School life is beset with innumerable and not always preventable contingencies. Minor emergencies constantly arise, but are readily managed or carried if regarded in terms of the total sweep of development. The long range view makes many worries unnecessary both for parents and teacher.

Consider the matter of neatness and accuracy in written work. High standards of excellence may be commendable as absolute standards; but not as relative norms suitable to the immaturity of the child. Writing, reading and arithmetic alike depend upon motor skills, which are subject to the same laws of growth which govern creeping, walking, grasping. They are subject to physiological awkwardness. A child falls down in the motor aspect of his school tasks for the same reason that he falls down in his early efforts to stand and to toddle. This simple fact is often sadly overlooked both by teachers and parents.

When the school child was a baby the adult attitudes tended to be more reasonable. One did not say he should walk at this or that age. Feeling confident that he would walk at the most seasonable time, one was more interested to observe the stage and degree of his preliminary development. If reading readiness and walking readiness are appraised on similar grounds, more justice is done to the child.

Maturity traits determine the general patterns of adjustment to the successive school grades, to teachers and to schoolmates. The kindergarten child, typically, is well adjusted to his home, and is equally at home when at school. The first-grader is likely to stand in pleasant awe of his teacher; the second-grader has a very personal relationship; the third-grader has a less emotional regard; the fourth- and fifth-graders may establish business-like working relationships.

Sex differences also determine patterns of adjustment. Girls may be more neat, slightly precocious in reading and penmanship, and may advance more rapidly in the early grades.

Individual differences should not be underestimated. They would be much more freely acknowledged if we did not make a fetish of uniform

standards during these years when the varying tempos and patterns of individual development declare themselves so strongly. It is contrary to the laws of nature that children should advance lock step through the grades. Individual variations in the development of speech are the rule and they are wide in range. Similar variations should be recognized in the closely related art of reading, and allowances should be made accordingly. A culture-conscious school, being democratically interested in all individual differences, would place a premium on non-verbal as well as verbal abilities.

Reading deserves special comment here because it is often made the basic factor in determining promotion. The school system places excessive emphasis on the importance of the printed word. An experienced high school principal has recently reminded us in forcible terms that at least a third of the entire secondary school population (grades nine to twelve) are "incapable of mastering the stock tools of learning (reading and writing) well enough to profit from text-book instruction." Not even attentive perusal of the pictorial comics has served to make these non-verbal millions of pupils masters of the printed page. The comics doubtless increase the reading vocabulary of the verbal multitude, but the non-verbal child suffers from limitations which are more or less constitutional.

This does not mean that he is backward or dull-witted. As a matter of fact he is frequently talented in less verbal directions, and is more than ordinarily wholesome in personality makeup. He may be able to "read" music, or physiognomy, or the contours of a landscape; or even the devious ways of his fellow men! In a word he may have excellent judgment; and a whole host of actual and latent skills, which will some day make of him a valuable citizen. In fact there are many potential leaders among the lower non-verbal third.

If our schools were less narrowly preoccupied with typographic reading, they would discover marked skills and potentialities early in life. We should not wait until the high school years before we discover our non-verbal pupils and burden them with the consequences of

educational neglect. At the latest they should be recognized in the fourth grade. NINE is a somewhat critical age for these practical lads (and some lassies) who need above all an enrichment of opportunity in the creative arts, in the technologies of science, in manual skills and in personal-social participation.

Reading, writing and arithmetic are not only tool subjects; they are symptomatic indicators. A discerning school system would be less concerned to measure achievement as end product; and more concerned to use the measurements as indicators of the total psychological makeup of the child, including his true interests, his maturity status and growth trends. There need be no fear of "progressive education" when it deals positively and realistically with the assets and liabilities of the individual child. A child-centered school can promote maximal development without sacrificing minimal competence in the "fundamentals," and in the conventions of everyday life.

But a child-centered school will not ignore the home; rather it will work in partnership with it. Such a school will be concerned about the kind of home in which the child has been reared, will be interested in his past biography. Every child comes to school with a long developmental career behind him. Can the school afford to be altogether unaware of that past? Parents can be helpful both to teacher and child by bringing significant information to the attention of the school.

When classes are too large and when teachers have been too narrowly trained, a flexible partnership between home and school is impossible. But a spirit of mutual cooperation is in harmony with the democratic tradition. Even under unfavorable conditions, parent-teacher organizations working in harmony with school administrators can be more democratically utilized to determine educational procedure and policy. Should the session be shortened? Should there be two sessions when most of the parents are sure that the children are over-fatigued? Should the lavatory facilities be improved? Should the child be laden so heavily with formalized homework? Or should the home be encouraged to supply special learnings through games and informal approach? Etc.?

The total welfare of the child should determine the answers to such questions. Sometimes home and school can decide together; although there are many areas where the responsibilities of each are separate and defined. But who is responsible, after the child has crossed the threshold of the classroom and after he has crossed the school premises? The journey home is not without complications. There remain joint solitudes and joint responsibilities to be shared by home and school.

If conflicts arise relative to the aims and methods of education, a developmental approach to the problems can have a solvent, clarifying effect. Most minor disputes can be adjusted by calmly asking, "*Why does the child from five to ten go to school?*" . . . He goes because society should have something to offer which will enrich his life as an adult citizen in the culture of tomorrow, and which will also enrich his life in the culture of today.

GROWTH GRADIENTS

§1. ADJUSTMENT TO SCHOOL

5 YEARS—Adjusts to school with relative ease. May request to stay at home intermittently; shows fatigue occasionally.

Mother or older child may need to accompany child to school for first few days or longer.

Girls are more apt to like school than boys.

May like to take a favorite toy to school.

Sometimes takes his products home.

Some children are better at home than at school and vice versa.

Very little reporting at home about school activity.

5 YEARS—Anticipates first grade but may have difficulty with adjustment.

May refuse to go to school because of some unpleasant experience.

Fatigue, with or without two sessions and frequent colds are common.

Brings, and may share toys, cookies or a book with classmates or teacher.

Loves to take his products home to show his parents.

There is little verbal reporting at home of his school activities but he may report about a "bad" child in the group.

7 YEARS—May not anticipate return to school in the Fall. May think it will be too hard. Some would prefer to remain in first grade.

Relationship to teacher is important in his adjustment.

CLASSROOM DEMEANOR

Likes to go to school with other children or alone rather than have his mother accompany him.

May show fear of being late to school. If he is to be late, would prefer to stay at home.

Shows fatigue, especially with two sessions.

Brings fewer things to school, though likes to display a new possession.

Now accumulates his products in his desk and takes home only occasionally.

8 YEARS—Enjoys school and even dislikes to stay at home, particularly if he will miss a special event.

Much less fatigue and fewer absences because of illness.

A few children are said to have an occasional "bad" day at school.

Some dawdle and have difficulty getting ready for school on time.

Now brings things to school which relate to his school work.

Some of his products may be taken home.

Many children now report on their school activities.

9 YEARS—On the whole likes school.

Takes responsibility for getting himself to school.

Apt to forget to take material to school unless reminded.

A few boys may take a gun or ball to school with them.

Reports some home and outside activities at school, usually in great detail. Talks at home about his standing in a school subject or about a special event.

§ 2. CLASSROOM DEMEANOR

5 YEARS—Needs some assistance from teacher with dressing and undressing.

Enjoys routine and adjusts to an activity program which allows freedom yet maintains control of the sequence of separate activities.

Changes from one activity to another with relative ease.

Likes to complete a task.

Some respond well to a rest period, others resist it.

Class can enjoy a directed activity for about twenty minutes.

"Reading" and "number" work closely associated with play.

Refers to teacher for materials, to tell experiences, and to show his products.

Child works in short bursts of energy.

Kindergarten activity is not highly social.

6 YEARS—Loves to be busy but will avoid things he cannot do.

Is in almost constant activity. Frequently stands to work at a desk or table.

Easily distractible as he watches others as well as within his own activity.

Does not know when to ask for help.

In attempting to form a group line, will push or lean on each other.

Can be given a choice of many things to do but may need suggestions from teacher to make his decision. Then may choose opposite.

Talks about what he is doing and what his neighbor is doing.

SCHOOL LIFE

When working does not like interference until he needs help.

Tries to conform and to please teacher and himself.

Some children spoil games and need individual play activity. May do better with teacher close by or may need separation from the group.

Likes a "chart" of own successes but not ashamed of showing to others even if has only a few.

7 YEARS—Works quietly and with absorption for periods.

Noisy and explosive during transitions.

Is impatient in his demands for assistance from teacher.

May regard neighbor's work and copy from it.

May whistle and make different noises.

Accumulates all sorts of objects in his desk or pockets.

Becomes concerned if does not complete a task.

Wants to know what comes next, how far to go, etc.

Is anxious for his place in the group and does not like to be singled out for reprimand or praise before the group.

Does not like teacher to repeat instructions although he may need repetition.

When whole class gets out of order, necessary to shift to a different activity.

Class becomes disorganized and some do forbidden things, if teacher leaves the room.

8 YEARS—Eager to verbalize and to respond. Cannot wait for a slow child.

May dawdle and be slow during transitions.

Tackles work with speed. Even likes to be timed in a performance.

May interfere with others by his need to verbalize.

Likes and seeks praise both from teacher and from neighbor. "My drawing isn't good, is it?"

May work better with separation from the group within the room.

Wants to have his turn and wants each child to have a turn.

Some play with "gadgets."

Teacher more aware of child's process. Can explain in group how his mind is working.

9 YEARS—Individual behavior more noticeable.

Quieter while at work, but may make sudden noise such as banging desk top.

Competitive in work and in play, and is afraid of failure.

Wants to work independently of teacher. Refers to her for assistance.

May be self-conscious when reciting before the group.

Has better critical evaluation of how he can do things best.

Knows when he is "sure" or "not too sure."

Works for longer periods and may be unwilling to stop.

Likes now to be graded and to compare his grades with others.

Isolation to do his work is less effective than earlier.

Needs to know own process and to be given individual assistance apart from the class.

§3. READING

18 MONTHS—Points to identified pictures in book.

2 YEARS—Names pictures in book.

2½ YEARS—Pretends to pick up objects from picture book.

3-3½ YEARS—May identify some capital letters in alphabet book or on blocks.

May select a letter by form, such as a circular or angular one, to identify. May learn to identify by association as "M for Mommy."

Enjoys song about ABC or *The Jingling ABC's*.

Wants to look at pictures in book when being read to.

4 YEARS—Identifies several capital letters. Some associate letter with the beginning letter of a familiar name: "S for Susan."

Enjoys having adult print his name on his products.

May identify a letter without naming. "That's in my name."

5 YEARS—May cease temporarily to identify letters formerly recognized, when attempting to print them.

Likes to identify repetitious phrases or words in familiar books such as exclamations or sounds that animals make. Also identifies word signs such as *stop*, *go*, or *hot* and *cold* on faucets, or words on cereal boxes.

Some like to underline letters or words in a familiar book.

May read letters in sequence and ask, "What does D-O-G spell, Mommy?" Likes to spell simple words as *cat*, *dog*, *yes*, *no*, and *mommy*.

In identifying letter or word, often selects first or last letter on a line and reads vertically from bottom up or from top to bottom.

Recognizes own first name.

May enjoy using wooden letters to represent names of people and may use these in combination with block building.

May recognize several or all numbers on the clock, or those related to certain routines. May identify some numbers on calendar, on telephone dial or on own house number plate.

5½ YEARS—More familiar with letters of the alphabet.

May translate a word into more familiar meaning: "*coffee*" for *cup*, etc. (similar to 2-year-old who names the picture of a cup "*coffee*").

May "read" pictures of a book.

Likes to listen to stories of children in action such as those in a First Grade primer.

May regard print as well as pictures when read to.

6 YEARS—Interest in small as well as capital letters.

Recognizes words and phrases, and perhaps sentences. Finds words related to picture or story. Matches words.

SCHOOL LIFE

Likes to have material which relates to his own experiences.

Beginning to develop reading vocabulary. Beginning to recognize word out of context.

Gets clues from length of word, beginning sound or letter.

Uses marker or points with finger at words.

Some like to read nursery books. May now read though earlier may have memorized.

Some like to pick out letters on a typewriter and have mother spell words for them.

May supply beginning letter but need help with rest.

Likes to listen to poems about letters such as found in *Sounds the Letters Make*.

When can read a book, apt to read and re-read it many times.

Typical errors of those who read: Words added to give balance (a king and a queen). May reverse meaning (*come* for *go*; *I* for *you*). Substitute words of same general appearance (*even* for *ever*; *saw* for *was*; *house* for *horse*). Add words (*little*, *very*, *y* at end). Tendency to carry down a word which was encountered on line above.

7 YEARS—Can now read sentences. Recognize familiar words easily and rapidly out of context.

Individual differences in reading rate are marked. In oral reading many try to maintain flow and prefer to have unfamiliar words supplied or they guess at them. Apt to repeat word or phrase to maintain speed. Some are excessively slow.

Likes to know how far to read. May use a marker.

In spelling may supply beginning and ending letters if cannot spell the whole word. May enjoy game of spelling words at home during routines.

Enjoys finding familiar words in a child's dictionary.

Typical reading errors: Omissions of short familiar words (and, he, had, but, and final *s* or *y*). Some similar additions (the, a, but, little). Substitutions are the most common error (*the* or *some* for *a*, *come* for *go*, *was* for *lived*, *a* for *the*). One letter substituted: (*pass* for *puss*, *some* for *same*, *they* for *then*). Changed order of letters: (*saw* for *was*, *three* for *there*). Letters added at beginnings or end: (*the* for *he*, *y* at end). Words of similar form: (*green* for *queen*, *bed* for *bird*).

8 YEARS—Masters new words through context, division into syllables, initial consonants prefixes and suffixes.

Mechanics and reading for meaning now in better balance.

Begins to be able to stop and discuss what he is reading.

Reads easy material with exaggerated expression. Considers it "babyish."

Uses table of contents and index.

Book usually held easily on lap with some little shifting of head distance. Seldom needs to point to maintain place. May point or bring head closer for a new difficult word.

Reads more rapidly in silent reading, and usually prefers silent reading. Also enjoys taking turns in reading a story orally.

WRITING

Typical reading errors: Greater variety of errors but they interfere less with mechanics and meaning. More omissions than additions, chiefly: *the, little, and, in, then*. May read words in a phrase in wrong order.

9 YEARS—Reading now more related to various subjects.

Individual differences in abilities and interest. Now some who have been slow have a real spurt.

Utilize dictionary.

May do better in silent reading but need to be checked by oral reading.

Many prefer silent reading but when reading for facts and information retain reading matter better when read orally.

Typical reading errors: Repetitions are frequent, usually one or two words at a time. Substitutions of meaning as: (*house for room, she for mother, beautiful for wonderful*).

§4. WRITING

3½ YEARS—Makes controlled lines, then scribbles.

In copying a cross, may split the horizontal line.

Likes to put a "frame" around paper.

4 YEARS—*Letters* Prints a few capital letters, large and irregular. Prefers circular letters as C, G, O, Q; or angular letters as E, H, I, L, T, A.

Selects first letters usually of familiar names as own name or of a member of family. T for Tommy, C for Charles.

Letters are often made with many parts (four parts to E).

Prints on page at random. Variable positions of letters and may lie flat in horizontal position. Seldom reverses.

Name May attempt to print own name (girls especially). Some print first few letters and mark for remaining ones. May split name in middle and continue on next line.

5 YEARS—*Letters* Prints some letters of varying sizes, in various positions and usually large. May be vertically reversed.

Letters formerly made in three parts are now made in two parts.

Asks help in forming or identifying letters already drawn. "How do you make F?" "That isn't any (letter) is it?"

May recognize a letter that is in own name without identifying it.

May write from right to left without reversing any letters.

Some like to copy letters and frequently do so from right to left.

Name Prints first name, or nickname, large and irregular. Printing gets larger toward end of name.

Numbers May print certain numbers which have significance. (5 for own age; 12 for 12 o'clock.)

May copy from the clock or calendar.

Some draw on a page from right to left without reversing. Some draw in a confused manner or reverse.

Marked variation in ability to write numbers. Some can write into teens and usually reverse the position of the separate digits (31 for 13). Frequently omit a number.

6 YEARS—Letters Prints most of the capital letters with several reversals (usually horizontal, fewer vertical).

Prints some words. May use all capitals and may use a mixture of capitals and small letters without differentiating their size.

Letters are now more apt to be drawn with a continuous stroke.

Prints large and increasingly larger letters as proceeds across page. Certain letters may be consistently drawn larger.

Beginning to recognize reversals but may not change.

Likes to use variety of materials: Writes on blackboard with chalk, or on large paper with crayon. Later able to handle writing at desk with a pencil.

Name Prints first or both names and may add middle name or add Junior at end usually in all capital letters.

Letters large and uneven. May reverse a letter (especially S). May not separate names, or may write one under the other.

Some print increasingly larger; some increase, decrease and then increase; others maintain fairly uniform size and write with an undulating line.

Numbers Many can write from 1-20. Print numbers large in horizontal rows.

May reverse order of digits in teens either in final product, or in execution (writes end digit first and places one in front of it).

Reverses one or two digits (3, 7 or 9 more usual).

7 YEARS—Words Prints or writes words and sentences, in capital and small letters.

Beginning to differentiate height of capital and small letters, but may make about the same height. Capital may be substituted for a small letter.

Writing is somewhat smaller and in a few it is greatly reduced in size.

Corrects letter reversals (usually 6½ years), but still makes an occasional letter in reversed position. May place letters in reversed order or omit a letter.

Beginning to separate words but sentences usually run together.

Tends to reduce letters in size as writes across page.

Prefers ruled paper. Some want large space, some small.

Likes to copy sentences.

Pencil grasp is tight with the forefinger caved in and the shoulder is tensed. Now prefers pencil rather than crayon for writing.

Likes to write correctly and erases a good deal.

Numbers Writes 1-20 or higher usually without error. May still reverse one, sometimes two numbers. The same number may be reversed as a single digit and not when it appears in the teens or vice versa. (6 and 9 most frequent; also 4 or 7)

Figures are smaller, and considerably smaller with a few children.

ARITHMETIC

Usually place numbers in one horizontal row at top of page, but some write in vertical column at this age.

8 YEARS—Words Can write several sentences.

Considerable variation in writing. Many now do cursive writing instead of printing.

Write fairly large and rather "squarely" usually with slight slant. A few still write large and very irregularly. Some write a medium size and somewhat evenly though still quite straight. Letters may be wider. If writing is becoming smaller, then capitals and looped letters tend to be disproportionately tall.

Reversals are now rare.

Now beginning to space words, sentences and paragraphs.

Tries to write neatly although sometimes hurries and does not care.

Still may not be able to write down all the ideas he has for a story.

Name Writes both names with good spacing and correct use of capital and small letters. Considerable discrepancy in size between capitals and small letters.

Great variation from child to child in size and style of writing.

Numbers In writing 1-20 does not reverse single digit. May reverse order in number 20 (02).

In written number work may still have an occasional reversal of a digit especially when making a double number.

9 YEARS—No longer prints, unless manuscript is to be continued form of writing.

Handwriting is now a tool. Writes for extended periods.

Writing is smaller, neater, more even, and slanted. The pressure is lighter (especially in girls). Some write with upward slant and some make letters irregularly.

Letters are in good proportion.

Some now have a skillful "style."

Now use finger movements with tension in the forearm.

Increase in speed and in volume of writing.

Occasional error when copying or in recording dictated numbers.

§5. ARITHMETIC

1 YEAR—"One-by-one" pattern of manipulating one object after another consecutively the rudiment of counting.

Can release one cube into a cup.

18 MONTHS—Can build a tower of 3-4 cubes.

Ten cubes into cup.

Uses the word "more."

2 YEARS—Distinguishes between one and many, but usually does not count objects.

Says "anudder." Idea of one more.

SCHOOL LIFE

Says "two balls" when handed a second ball. Can say "big ball" if big and little are presented.

Can build a tower of 6-7 cubes.

2½ YEARS—Can give "just one" cube on request.

May count by rote: one, two, lots.

3 YEARS—Can usually count two objects. May or may not start with "one" when counting. Is reported to count to five.

Can give "just one" or "two" cubes on request.

Activities may be influenced by numbers. May demand "three" or "four" of everything.

4 YEARS—Counts with correct pointing three objects.

Is reported to count to ten. May start with a number higher than one. Verbal counting without objects definitely exceeds counting of objects.

4½ YEARS—Can give "just one," "two" or "three" cubes on request.

Counts with correct pointing four objects and answers "how many?" Some can count ten objects.

Understands the terms "most" "both" and "biggest" but not the terms "same" and "equal."

5 YEARS—Counting by ones: Usually stops just before a decile (19, 29). May jump from 29 to 40, or go back to a smaller number.

Counting objects: Can count and point to thirteen objects. Some difficulty maintaining regard and pointing and if loses sequence is apt to go back to beginning again. May need two or three trials.

Naming coins: Names a penny. Likes to take from adult to give storekeeper for a purchase.

Writing numbers: May write some numbers from dictation. Names and verbalizes as writes. "I don't know what 7 looks like." Usually writes in confused manner (2, 5 and 8) or reverses (3, 7, 9 and teens). Omits 6 and 9.

May write in horizontal line across top of paper or vertical line at left of paper. May place anywhere on page.

Some like to copy numbers from clock. May know numbers such as 7, 3 or 12 associated with time of events in daily schedule.

May not be able to identify the number made. Asks, "What does it look like?"

Addition and subtraction: Some enjoy oral figuring and can add within five. May use objects or fingers and count by ones. Errors are usually one number more or less than correct answer. In attempts to subtract within five, counts forward from one to larger number using fingers, then counts backward to answer.

5½ YEARS—Counting by ones: Error at decile or at 17 or 27 or omit 7.

Counting objects: Can count to twenty, pointing correctly and giving total on one or two trials.

Writing numbers: Writes from 1 to 10 or higher with many reversals, or in teens wrong order (71 for 17) and/or reversal. Writes in confused manner: 2, 5 and 6.

Reverses: 3, 4, 7 and 9. May omit 9. Writes horizontally across top of page. Many turn paper sideways and then write horizontally across width of paper. Verbalizes: "I can't make it." "Down like that and over like that." "My hand gets kinda tired."

Addition: Adds correctly within five. Counts on fingers or counts in mind, starting with the smaller of the two numbers.

Subtraction: Subtracts correctly within five.

6 YEARS—Counting by ones: Counts to 30 or more. May over estimate how high he can count: to "million" "dillion."

Counting by tens: To 100 or to 90 and then says "20."

Counting by fives: To about 50.

Names coins and knows number of pennies in nickel and dime.

Counting pennies: Counts twenty with correct pointing and gives total.

Writing numbers: Recognizes and may write numbers to 12 or 20. Writes large, with some numbers (especially 5) larger than others. Reverses especially 3, 7 and 9. Rarely omits a figure. Usually writes horizontally across top of paper.

Verbalizes: "Can't too well because I mess them up." "I'm tired. I'm hot, too." "I wonder if I'm making them backward."

Addition: Many add correctly within ten. Count starting with larger number or at the one following this: ($3 + 7$: 7, 8, 9, 10 or 8, 9, 10). Errors are usually one number more or less than correct answer. A few guess. Some know small combinations, especially balanced numbers as $3 + 3$ by heart.

Subtraction: Correct within 5. Counts from one to larger number and then back. May add instead of subtract. A few use balanced numbers to figure from.

Likes to group objects: 4 of this, etc.

Interest in balanced numbers: 2 and 2, 3 and 3, etc.

Uses simple measurements: pint and quart.

7 YEARS—Counting: Can count to 100 by 1's, 5's, 10's and by 2's to 20.

Naming coins: Can name penny, nickel, dime, quarter, half-dollar and tell how many pennies in each.

Writing numbers: From 1 to 20 or higher. Fewer errors. Some reversals especially 4, 7 and 9 or reverses position in teens especially 12, 17, 19, 20. May write horizontally or vertically on page. Little verbalization while writing, though small mouth movements indicate silent counting.

Addition: Correct within twenty. A few make errors of + or - one, suggesting that they are still counting. Others know combinations, especially even combinations, ($3 + 3$) by heart, and break harder ones down into known combinations and figure from there. Thus $18 + 5$: $18 + 2 = 20 + 3 = 23$. In the teens may add the right hand figures and then precede answer by one, thus $14 + 3$: $4 + 3 = 7$, preceded by 1 = 17.

Subtraction: Subtracts correctly within ten. Counts backward from larger number: uses balanced number ($10 - 4$: $5 + 5 = 10$, $5 - 1 = 4$, so $5 + 1 = 6$, therefore $10 - 4 = 6$); changes to addition ($6 - 4 = 2$ because $4 + 2 = 6$). Knows many combinations by heart.

SCHOOL LIFE

When doing written work, does not shift easily from addition to subtraction on same paper.

Likes to write a number of many digits.

Learning to use fraction of one-half of a unit or a group.

8 YEARS—Counting: Counts by 3's to 30 and 4's to 40.

Writing numbers: Rarely makes an error in writing numbers through 20 or higher.

Spaces correctly and may put dots and dashes between. Figures are more uniform and smaller.

Addition: Knows many combinations by heart. Some count by ones from larger number; some rearrange in combinations which they know by heart ($8+5$: $7+5=12+1=13$). Occasional error of + or - one.

Subtraction: Knows some combinations by heart. In teens may subtract the right hand figures and then precede this answer by one. Errors mostly + or - one but a few "wild" answers suggest that they are no longer counting by ones.

Learning to add and subtract one to three digit numbers requiring borrowing and carrying.

Multiplication: Through 4 or 6 table. Knows some low combinations by heart, especially 3×3 , 4×4 . May add ($3+3+3=9$), or say table.

Division: Uses simple facts of short division. Errors mostly + or - one of a single digit in the answer.

Can measure distances in room in terms of feet.

Fractions: Uses fractions of one-half and one-quarter.

Interest in weights of people and things.

Interest in money and relative value of coins.

Shifts process frequently. Suddenly shifts to adding when multiplying. May be aware of it and say, "I always do that!"

9 YEARS—Writing numbers: Writes numbers accurately though may make occasional error when dictated to or when copying from the board. Prefers to figure by writing numbers down. Does not verbalize while writing but may not do neatly and says: "My worst numbers," "My most careless thing." May now prefer to write a vertical column.

Addition and subtraction: Knows all simple combinations by heart. May select certain combinations when adding a column.

Can tell own process. Knows what combinations has most trouble with and may write them on a card or desk until knows by heart. Wants to analyze errors with teacher. Likes to differentiate between "good" errors and "bad" errors.

Multiplication: Through the 9 table. Errors are mostly with 7 or 9. A typical error is to substitute 6 or 8 for 7, or 8 or 10 for 9 (\pm one shift). Most now multiply instead of adding. May change 8×3 to 3×8 . May start from even numbers 6×7 : $6\times 6=36+6=42$; or from one he knows by heart and adds or subtracts from this.

Fractions: Learning to use fractions and measurement.

Division: Can, on paper, use 2 to 5 digit dividends and 1 digit divisors, using the method of long division.

Can keep accounts and records.

THE ETHICAL SENSE



THIS chapter deals with a prickly theme. Any discussion of morals, whether it be the morals of children or of adults, inevitably invites confusing emotions and conflicting concepts. It is almost impossible to set aside adult preconceptions of what a child *ought* to do; and so we fail to understand what the child *does*, and what he actually is.

Our culture is surcharged with moral directives and with ethical norms which must be preserved if civilization is to survive. Generation after generation the wisest of men have argued the age-old questions of Right and Wrong. The literatures of the race are laden with writings on virtue and sin, duty, discipline, punishment, justice, mercy, guilt, expiation, retribution, salvation and transgression. Not so long ago

there were sober disquisitions on inborn child depravity. Nor have all the ghosts of the past yet been laid.

As adults we inherit a culture of long lineage in which time tested wisdom is intricately mixed with persisting error. We cling to arbitrary absolutes which prevent us from seeing the true and ever-changing nature of the growing child. Although this chapter concerns morals, we shall not subject the reader to any further preachment. Our purpose is to describe objectively the growth of the art of good conduct in the child from five to ten. This is a complex art which depends upon the development of an ethical sense,—a sense which matures by natural progressions.

What are these progressions? The growth gradients which follow indicate that the underlying growth mechanisms begin to operate in early infancy. At the age of ten years these same mechanisms are still operating. They continue throughout adolescence. When, indeed, *do* morals mature? And if we compare the tremendous moral growth of the first decade with the relative increments of the second decade, does not the child give an amazingly good account of himself? To what extent has the adult transcended the gradients of infancy and childhood?

The ethical sense defies definition, unless we resort to oversimplified absolutes, and merely say that it consists in the capacity to distinguish right and wrong in thought and conduct. But such a definition is not very useful. What we are really interested in is the development of that capacity, as manifested in patterns of behavior.

A child is not born with a weak ethical sense which becomes stronger as he grows older. He is born with certain dispositions and potentialities, which undergo progressive organization from day to day, and from month to month. As early as the age of 6 weeks the child smiles by himself. An egocentric smile! At 8 weeks he smiles back at the beaming face of his mother,—a responsive social smile, which relates to some one else! At 12 weeks he spontaneously initiates a similar smile,—a reciprocal social smile, which has a double origin, a two-way implication! In this simple sequence we already glimpse the dynamic which governs

the growth of the ethical sense. There are three phases to this fundamental dynamic which repeats itself again and again with ever widening elaborations as the spirals of development ascend: (a) intrinsic-self phase (b) social-reference phase (c) a reciprocal self-and-social phase. We need not burden our discussion with these designations; we simply mention them at the outset to suggest how the "moral fibers" of infancy and childhood are gradually interwoven into patterned textures and how the shuttle weaves back and forth between the central self and the selves of others.

Already the infant is sensitive to smiles of approval. Soon he will be sensitive also to frowns. Very early (about the age of 36 weeks) he heeds a monitory "No! No!" as a nursery game, and also as a serious command. Here we glimpse the germs of self-inhibition and of social disapproval. At one year the baby is so highly socialized that he likes to please others. At any rate, he greatly enjoys repeating performances that are laughed at by others. So far as the culture is concerned, he is already caught in a complex web of smiles and frowns,—of approbation and disapprobation. His moral welfare would appear to be assured.

But, behold, at the age of 15 months he has a will of his own, so strong that he no longer heeds "No! No!". His conduct becomes self-assertive. He insists on doing things for himself. Sometimes he seems to carry this insistence to excess. He does not accept the kind of protectiveness which he welcomed at the age of one year. He casts his toys in a "self-willed" manner. But we do not make a moral issue of his obstreperous behavior. He is too young for that. Tolerantly we recognize the favorable and constructive significance of the growth changes that are taking place before our very eyes.

All too soon, however, his behavior is misconstrued through over rigid application of standards of right and wrong. As he approaches his second birthday, more and more is expected of him. His toilet behavior may be made the object of emphatic approbation and disapprobation. At 18 months he may hang his head in shame if he is adjudged "guilty"

of the puddle for which he is "responsible." He counters by blaming the misdeed on some one else, as though groping for an alibi.

Does all this mean that the young pre-school child is in possession of an ethical sense and that he can be credited with self-reproach and a consciousness of guilt? And having credited him with these capacities, shall we hold him unwaveringly to exacting standards? If the ethical sense were a special distinctive faculty of the mind, our reply would be affirmative. But the ethical sense is not such a faculty. The mind is an enormously complex system from which the ethical attributes cannot be separated. To evaluate the moral significance of the conduct of an 18 months child we must consider the total child in all his attributes rather than his conscience per se.

We doubt that his feeling of guilt is profound, or that it encompasses his whole personality. He is probably incapable of blushing; although in another year or two a sensitive child may indeed blush when reproved for a fault. Darwin, by the way, regarded blushing as the most human of all emotional expressions.

The primitive shamefacedness of the 18-month-old denotes a simple form of shyness and withdrawal, linked in the present instance with the function of elimination, which is closely bound up with his emotional life. Nevertheless, this disgrace gesture with its projective reference to some one else, reveals that the personal ego is elaborating, and has even attained a measure of detachment, in its capacity to set up a flimsy alibi.

This capacity has far-reaching import for future developments, but we must emphasize that the ethical sense, as a psychological structure is still extremely meager. It will take years of structural growth and of patterning experience before the individual is capable of the higher forms of moral judgment. As adults we are too prone to think of the ultimate forms, rather than of the gradients which lead to them.

Fortunately, the gradients have a forward reference, and even undesirable behavior sometimes signalizes a growth process which becomes constructive under skilled guidance. The 2½-year-old, for example, when confronted by two alternatives has a way of trying out both. Op-

posites seem to have equal appeal. But with experience and with help, he learns to choose *within the limits* of his maturing capacity. At the age of three, he actually likes to make choices and he likes to please. Within the limits of his maturity he is becoming a moral agent, who assumes, and who should assume, suitable responsibilities.

At four years, for developmental reasons, he is apparently less anxious to please. He is less sensitive to praise and blame, and he needs new kinds of motivation when questions of obedience arise. He tends to go out of bounds. Wisely managed, he usually proves to be conforming again at the age of five. Then he invites and accepts supervision. He likes to ask for permission, even of strangers. He likes to stand in well with people. His ready obedience has an attractive quality. He is very good!

But "obedience" is not an absolute trait, fixed once and for all. It is really only a general label for a diverse group of specific obedient acts of which a child happens to be capable. The patterns, the contexts and the occasions for obedience inevitably change with age. The wise parent never makes a fetish or even a goal of obedience for its own sake. As we have already noted in our behavior profiles the whole map of behavior undergoes deep changes in the second half of the fifth year and throughout the sixth. The psychological transformations involve the entire personality, creating new problems of conduct for the child, and new demands for guidance for his father and mother. At five his sense of goodness and his good conduct consisted largely of obedience to the commands of grownups. His ethical development between the years from five to ten is clearly traced in his expanding concepts of GOOD and BAD, particularly goodness in himself and badness in others. The two-way dynamic works like a weaver's shuttle, as he penetrates more deeply into his own ego and that of his coevals and elders. Observing others helps him to understand himself. And what he inwardly feels he also ascribes, more or less aptly, to others. A nicely balanced two-way appraisal is no mean feat. It takes skill. It takes maturity.

No wonder the 6-year-old is ethically inept when the tide of development brings him to a level where he yields to the temptation of cheating.

a new form of behavior which he partly learned by being cheated! He has an acute sense of possession; but a very poorly organized relation to his belongings. He must also have an acute sense of self-status; for he cannot gracefully bear to lose a game. He will cheat on occasion. But to even the psychological score, he denies his guilt and he displays an apparently altruistic worry about the cheating of others! Perhaps he worries most at the very time when he is himself most liable to cheat. And note, he does not dwell much on honesty as a positive excellence. He approaches that bright jewel by the indirection of its dark opposite. There is a negative corner to Robinson's barn, and it may well prove to be the nearest way home.

In the seventh year there is already a decline in the amount of cheating; and a more robust insistence on the part of the 7-year-old that there should be no cheating by others. Thus he adds his own weight to the social disapprobation of dishonesty. Thus the threads of the fabric of morals are minutely, ceaselessly woven; and the children themselves help to fashion the growing designs.

Pensive SEVEN has a new type of awareness of the GOOD and BAD. Home ties are loosening; he vaguely apprehends the community. He generalizes and abstracts to a degree far beyond conforming FIVE and sketchy SIX. He does not limit his thinking to specific acts. He is beginning to sense the *qualities* of goodness and badness, and to erect more universal standards of conduct to live by. He is getting a firmer grip on everyday honesty and truth. His blaming and alibiing have moral overtones, and he can even be appealed to on ethical grounds. All of which means that he is becoming more of an individual among individuals.

EIGHT with all his expansive and evaluative traits is yet more conscious both of himself and of the selves of others. His awareness of these others is more perceptive, and increasingly subtle. He shows an impressive catholicity of insight into the good characteristics as well as the shortcomings of his comrades. He grants that Boy X is the best athlete, that Girl Y is the most skillful artist in school, that Boy Z is not always fair, but that he is the most fun in this game or that, etc., etc. The widening

range and refinement of his estimates lend substance to his ethical outlook. Vigorous morals are based on acquaintance with the world.

The evaluative tendencies of EIGHT do not exclude himself. He is vulnerable to criticism. He is contrite. He will *never*, no NEVER, do it again! All told, he has the essentials of an advanced ethical sense. He is sensitive; he is not over competitive; he has a fairly tolerant insight into the psychology of his associates; he shows a strong tendency to work out his relationships with them, unaided by interference from without. He may squabble in the process; but even so his collective behavior represents an embryonic forecast of a democratic culture.

The 10-year-old registers a further advance along these same promising developmental lines, when surrounding conditions are favorable. Cultural controls have become of increasing importance in moulding the resultant patterns of social behavior. A most important period for the prevention of juvenile delinquency embraces the years between seven and ten.

The normal, well rounded 10-year-old is already a law abiding citizen. He is able to organize and to conduct a club, with rules, regulations and referee. His bylaws, written or unwritten, ban lying and cheating. He is morally mature enough to sternly oppose black markets. He follows leadership, but he also participates in discussion, and he can wait his turn in the discussion, because he has outgrown the eight-year-squabble and the six-year-quarrel, and the five-year-compliance. Best of all he has a sense of humor. He is able to take a joke on himself,—a capacity which we would include as one of the metaphysical ingredients of the ethical sense.

In this narrative interpretation we have naturally stressed the constructive aspect of the developing ethical sense. There is such an aspect inherent in the process of maturation. It may be contended that there are also evil possibilities and eventualities in this same process; because the "normal" child is not uniformly "good." He is sometimes selfish, destructive, deceitful,—at least by dictionary definitions. Even the 10-year-old, whose virtues we have just proclaimed, can use his new found

ethical abilities to spite his comrades, to gang up against them, and to disrupt their club activities.

In the shadow of world-wide wars, we may have to take a second look at the moral constitution of man as embodied in children. Here we get a first glimpse at the face of evil. It would, however, be gratuitous to assume that the failures of adult ways of life are due to the limitations of children. These limitations are relative, and in large measure manageable because they have a natural negative function in the economy of development.

This does not mean that we place a premium on "badness," or grant it license. Mere indulgence does not lead to constructive prevention and to control. But a knowledge of the developmental logic of misbehavior will enable parents and teachers to use enlightened methods of management. On many pages in this volume we indicate concretely how adults can use foresight to spare children from excessively difficult moral situations. Intelligent anticipation will avoid many an emotional crisis. A developmental interpretation will reduce the emotion if the crisis comes. In the first ten years of life, it is unwise, and usually unjust to impose standards of conduct *arbitrarily*. Arbitrariness leads to emotional conflicts and to intellectual confusions. Parents frequently become emotionally "burned up" by the child's poor manners,—a misplaced emphasis which suggests a confused scale of values. And manners, like morals are influenced by immaturity. They do not yield to arbitrary authority.

Harsh forms of punishment are, of course, automatically ruled out by a developmental approach to the problems of child conduct. When an adult pits himself against a child for the mere sake of preserving authority, no good follows. Care needs to be taken even in exacting apologies. Apology is a form of expiation, intended to set matters right between child and adult, or between child and child. But injudiciously demanded it leads to insincerity or resentment, or to a sit-down strike. Forceful physical punishment is so difficult to apply beneficially in times

of crisis that it is the better part of wisdom to have recourse to more enlightened methods of control.

In all disciplinary situations the adult must keep an eye on himself as well as on the child. He should feel certain that he is not demanding too much in terms of the gradients of growth. He must be sure of steps 1, 2 and 3 before he exacts steps 4, 5 and 6. He will not knowingly confuse manners with morals and will keep his eye on the one long range goal: the mental health of the child. A sense of humor and a little skillful, face-saving banter, can work miracles in discharging emotional tensions, even in the moral realm.

And perhaps, we should think more in terms of emotional equilibrium, and less in the gloomier terms of expiatory punishment and of retributive justice. Because over the long pull which begins with birth, there is nothing more stabilizing than affection and mutual respect between adult and child. Morals are rooted in mutual respect, and in the reciprocity which comes with such respect. Reciprocity in turn leads to reason, and ultimately to the concepts of equity, which distinguish the mature ethical sense.

GROWTH GRADIENTS

§1. BLAMING AND ALIBIING

18 MONTHS—Blames "puddles" on others—cat, grandmother. Says "no" if asked if he made them.

Becomes angry if things do not work as he wishes.

If he takes something he shouldn't, may run away and drop object.

21-24 MONTHS—Becomes angry at inanimate object. Kicks and hits chair, etc.

4 YEARS—Blames inanimate objects. Some tattling on others.

Will sometimes admit own fault in a whisper: "An accident."

5 YEARS—Denies own fault if questioned directly.

Blames nearest person for his own misdeeds: "Look what you made me do."

6 YEARS—Usually denies own fault if questioned directly. May blame sibling, friend or mother.

THE ETHICAL SENSE

If admits fault, alibis: "He made me do it," or "His fault," or "I didn't mean to."
Can be led into admitting fault by an indirectly worded question: "How did you do it?"

May blame inanimate objects for his mistakes in school.

Better at accepting blame for big things than for small.

7 YEARS—Directly accuses others: "He did it," or "His fault."

Alibing takes form of self-justification: "I was just going to do it," "That was what I meant."

May throw book if cannot read; may throw game cards if loses game.

8 YEARS—More responsible for his acts. Usually some justification if blames another person.

May deny guilt, but not blame others.

Blames himself. Feels need to apologize. Says he will "Never do it again."

May evaluate own action and feel guilty about it.

9 YEARS—Wants blame apportioned fairly; much interest in who started any difficulty; tries to explain own behavior; reasons his way out.

Some can accept blame and say "I did it and I'm sorry"; may even feel ashamed of own wrong doing; upset if blamed for something he has not done.

Makes excuses when things go wrong (studying and practicing): "He was bothering me."

Considerable "taking it out on others," "picks at others"; if hurt kicks the next fellow who comes along.

Self-criticism implied in "I would do that!"

§2. RESPONSE TO DIRECTION, PUNISHMENT AND PRAISE

1 YEAR—Gives object on request.

Repeats performance laughed at.

Imitates simple behaviors.

May be inhibited by "No-no."

15 MONTHS—No longer enjoys game of "No-no" but demands his own way. Physical restriction and removal of breakable objects necessary.

18 MONTHS—Responds to verbal "No-no" but not consistently.

Knows where things belong and likes to put them in their places.

If fatigued, grabs things and resists physical inhibition.

Temper tantrum if cannot have own way.

21 MONTHS—Very insistent on having own way but cannot verbalize wants. Direction praise or criticism have little effect in altering his demands.

RESPONSE TO DIRECTION

- 2 YEARS—Demands strong at home though child may be meek and compliant away from home. Cannot share, but at adult suggestion can accept substitutes.
- 2½ YEARS—Opposites are of equal value (yes-no). Tries out both simultaneously, even in responding to directions.
Verbal directions not enough. May need physical restraint.
Tantrums and refusals to obey.
Imperious, domineering, wants his own way.
Neither praise nor blame very effective.
Can sometimes accept substitutes when two children want same object.
- 3 YEARS—Responsive to directions. Tries to please and conform. "Do it dis way?"
Attentive to spoken directions. Notes facial expressions.
Can be bargained with; can be put off until "Later," or "When it's time."
Begins to be able to share, to take turns.
Fewer techniques and fewer environmental restrictions necessary.
Takes routines more for granted.
Responds best to specific suggestions, rather than general ones.
Susceptible to praise, also to blame.
- 4 YEARS—Less anxious to please, obey, conform.
Routines go smoothly and independently.
Out of bounds, resistant response to many directions. But can understand that rules and restrictions are sometimes necessary. Likes to receive new privileges.
Verbal restrictions now better than physical.
Goals and competitions help motivate.
Less sensitive to praise and blame.
- 5 YEARS—Needs, invites and accepts some supervision and direction.
Asks permission. Asks, "Is this the way to do it?"
Likes to help mother at home.
Likes approval but does not demand praise. Likes to please and to do things right.
May hesitate to carry out direction but usually does. May refuse because he can't do a task, or is too busy.
Many are described as "angels" or "perfect."
If corrected or reprimanded may become angry and cry.
- 6 YEARS—Responds slowly or negatively to demand, but in time may spontaneously carry out as though it were his own idea.
If pressed, may be defiant: "No I won't," or "How are you going to make me?"
An indirect approach is usually more effective: counting, magic word, a surprise.
Needs extra chances.
Needs clear simple directions in advance to get him started in the right direction.
Vacillates with two choices and usually ends with wrong one.
Loves praise and wants approval.
Resists punishment physically and verbally. Punishment does not improve behavior.

THE ETHICAL SENSE

If criticized or blamed may become saucy, rude, argumentative or have a temper tantrum.

May respond to isolation.

7 YEARS—Does not respond promptly; often does not hear directions. May forget easily. May argue: "But mommie," or "Why do I have to?" Delays: "Just a minute" (which may be several).

May start to obey and then get into a detour on the way.

Wants to be warned ahead of time. Also likes to know what punishment will be.

Can plan with him to avoid disaster.

Better at helping mother than at doing household tasks alone.

Is suggestible and sensitive. Cares what people think of him.

Many respond well to praise though it is less necessary than at some ages. May be embarrassed by praise.

If criticized or if feelings are hurt, may cry.

8 YEARS—Delays in carrying out a request; may argue and find excuses but finally obeys with "If you insist."

Demands to be treated as an adult. Wants cues, a hint, secret codes. Wants instructions worded just right.

Likes to work for an immediate reward, not just to help.

Responds to small deprivations for short periods. May say "I didn't care anyway."

Loves praise and to be reminded of his improvement.

May burst into tears if blamed or criticized, or may say "Who cares?"

Mere words or a look may suffice to help him to control his behavior.

Often cannot tolerate even a slight correction.

Feels guilty if he does wrong: "Never do it again."

Does not like to be teased or joked about.

Criticize and compliment each other.

9 YEARS—Can now interrupt own activity in response to a demand from adult. Securing his attention may depend upon his interest and willingness to carry out the request; may wish to postpone until later because so busy with his own interest and then may forget.

Needs to be given detailed directions and to be reminded.

Much less "arguing back" than earlier.

If does not like directions may look sulky, cross, truculent, but if no issue is made will usually obey eventually.

May go from extreme of taking over authority for himself (unexpectedly brings a child home to lunch) to asking permission for some small thing.

May prefer reasonable appraisal of his work rather than praise, though nearly all welcome praise.

A threat, or deprivation of some desired object or activity usually suffices to put him in line.

May be "sore" at punishment; "gyp," "not fair," "just my hard luck."

Takes criticism better than formerly, but it still needs to be carefully phrased.

RESPONSE TO REASON

Says he is sorry if he does wrong and may feel ashamed of himself.

Group standards may be more important in determining behavior than parental standards.

Begins to be able to take a joke on himself.

§3. RESPONSIVENESS TO REASON

2½ YEARS—Cannot make choices. Wants both extremes.

3 YEARS—Better at making choices. Likes to be confronted with a choice.

Adult can bargain with him.

Responds to reason. May do something he dislikes if given a good reason.

5 YEARS—Not much difficulty in making up mind. Decides quickly what he wants; does not present himself with too many alternatives.

Likes to do things his own way but also likes to conform and to please adult. Thus adult can change his mind. May refuse because he considers himself unequal to demand.

6 YEARS—Difficulty in making up his mind. Vacillates between two choices. Gets mixed up.

Will not change mind once it is made up.

If reasoned with, does not change mind, but explodes into temper.

7 YEARS—Transition stage. Somewhat easier to make up his mind, to make choices and simple decisions, especially if both alternatives appeal to him.

Still hard to change mind, but can occasionally listen to reason and change mind without exploding into temper.

Has standards and is trying to live up to them. Thus may be appealed to ethically.

8 YEARS—Makes up mind rather easily, though he has difficulty with little things of life.

Knows what he wants.

Frequently can listen to reason and can change his mind with some ease.

However, does like to have his own way.

9 YEARS—Can make up mind easily and some can change it in response to reason, though this does not hold for all issues.

§4. SENSE OF GOOD AND BAD

1 YEAR—Repeats performance laughed at.

May be inhibited by "no no."

15 MONTHS—Wants own way. Not inhibited by "no no."

18 MONTHS—Shame at making puddles.

Runs away and drops object he has taken.

THE ETHICAL SENSE

- 21 MONTHS—Conscious of adult approval or disapproval.
- 2 YEARS—Imitates phrases "good boy," "bad boy" in regard to toilet functions and other routines.
- 2½ YEARS—Opposite extremes appear to be of equal value—"good—bad."
Little influenced by adult approval or disapproval. Wants his own way.
- 3 YEARS—Tries to please and conform. "Do it dis way?"
Responds positively to question, "Have you been a good boy?"
May repeat prayers about "God make me a good boy."
- 4 YEARS—Begins to understand about *rules* and ways to do things.
Some interest in good and bad, but not much understanding.
- 5 YEARS—Child is "good" (from adult point of view) much of the time.
Sense of goodness and badness limited largely to things parents allow or forbid.
Child's "goodness" largely due to his interest in conforming and obeying. "Is this the way to do it?"
Likes to help mother and to do other things considered by adult as "good."
Likes to stand in well with people and to ask permission.
Understands and respects rules, that he must get to school on time, etc.
Knows when he has been good and may plan to be good next day.
Dislikes being called "bad." May play being "bad."
- 5½ YEARS—Little generalized sense of good and bad. Seems to keep in mind for each specific thing whether it is "good" or "bad," i.e. allowed or forbidden by parents.
Likes to be made to conform; but seems often to define what he must not do by doing it.
Much interest in behavior of playmates; whether it is good or bad, whether they do things in the right way.
May behave better away from home.
- 6 YEARS—Notion of good and bad still largely connected with specific activities allowed or disapproved of by parents.
Rudiments of a sense of good and bad, and may ask, "Was I good?" (Question usually asked after he has been bad.)
Very undifferentiated in ethical sense as in other fields.
Great interest in behavior of playmates: whether good or bad, whether they do things in right way. Especially report on bad behavior of playmates.
May think that other people are not fair.
Chief interest is in having own way.
Once he has started misbehaving, is not influenced by criticism of his behavior.
- 7 YEARS—Simple but generalized notions about goodness and badness. Knows that some kinds of behaviors (obeying, doing things willingly) are good and others bad.

SENSE OF GOOD AND BAD

Has standards of goodness for himself as well as for others, and means to live up to them.

Has a sense of fair play and can be appealed to ethically.

Thinks that things are "a gyp," "not fair" and that he too must be "fair."

Judges behavior of playmates as good or bad but not quite as verbal as at six.

His own behavior varies, sometimes quite good, sometimes not. May be better away from home.

Concerned about being good. Proud of good days. Worries about bad ones.

Realizes that being "bad" spoils things.

8 YEARS—Aware of goodness and badness. May try to evaluate them.

Good and bad no longer just what parents permit or forbid.

Child wants and means to be "good." Wants to be appreciated.

Tries not only to live up to his own standards but to what he thinks are the adult's standards.

More evaluation may lead him to believe that he has been "bad," or has failed to live up to standard. Then may feel guilty.

Inwardly unhappy if he does wrong. Dislikes to admit wrong-doing.

If fails to live up to standard, wishes failure to be condoned: "Do you blame me?"

"Could I help it?"

Thinks of things as "right and wrong," no longer simply as "good and bad."

9 YEARS—Less concern about good and bad; now thinks in terms of right and wrong.

Wants to do things the right way; may be ashamed of being wrong.

Interest in fairness of teacher, of others and of punishment.

Evaluates behavior of other children: "He's a good sport."

Standards are those of contemporary group; disgusted with others who do not live up to these standards.

§5. TRUTH AND PROPERTY

18 MONTHS—*Property* May have a special toy, blanket or other object to which he is attached. Unable to sleep without it.

Definite relationship of possessions to their owners—takes hat or pocketbook to its correct owner.

Knows where things belong and likes to put them in their places.

21 MONTHS—*Property* At home may know which objects belong to each person. In grocery store, etc., may walk off with merchandise unless prevented.

2 YEARS—*Property* Possesses as many things as possible. Strong feeling of ownership, especially in toys. "It's mine" is a constant refrain.

Great pride in clothes—especially in shoes, socks and handkerchief.

Interest in possession is one-way, an interest in his own things. Interest in possessions of others is merely verbal: he likes to name over what things belong to what people.

Hoards toys. **Cannot** share them.

May bring small token, such as a marble or orange section to school and hold onto it all morning, objecting to anyone's taking it.

Money Names penny. Interest in money, but almost no understanding of its use. Likes to use it manipulatively and to carry it around.

2½ YEARS—Property Child is "into everything" regardless of what or whose it is.

Objects which he is not to touch need to be removed from reach.

Interest in acquiring possessions of others, though seldom plays with them.

Brings a favorite toy to school to show others, but cannot share it. May bring same object every day.

Clings to favorite possessions when insecure.

Especially fond of hats and mittens. May cling to old clothes and dislike new ones.

May go through elaborate rituals with possessions, at home.

Money Likes to have a few pennies in his pocketbook and is very possessive about them.

If asked "What is penny for?" (meaning what is its use) will answer, "For me."

3 YEARS—Property Beginning to share toys; less hoarding.

Brings possessions (books for example) to school in order to share with others.

May enjoy exhibiting possessions, then forgets about them (at school). May bring a different object each day.

Enjoys new clothes and likes to exhibit them to others, especially to teacher.

Money Likes to have pennies to put in the bank.

Knows that money is used in making purchases though has no idea of how much.

Play money is often a very satisfactory substitute for real money.

4 YEARS—Property Much interest in possessions. Showing off and bragging about possessions: "Mine is bigger (better) than yours."

Especially proud of large possessions (big bed) of which he can boast.

Possesses parents and boasts about them.

Begins to possess his special friends.

Strong feeling for teddy bear. May treat him as a real person.

An age of bartering and swapping of possessions. Most apt to share with special friends.

Shows off new clothes.

Strong personal feeling for own products made at school. Wants to take them home.

Will help feed and care for pets under parents' direction, but not dependable.

Honesty Expansiveness leads to taking of small objects (such as labels) from store, objects of little value to either store or child.

May take home school equipment as well as own school products.

Money May know what penny will buy and may save several pennies to buy a more expensive object.

Can count three objects.

Objects to parting with money, even in purchase.

TRUTH AND PROPERTY

Truth Tells very tall tales, often with little basis in fact.
The peak age for imaginative verbalization.
Often makes little distinction between fiction and fact.

5 YEARS—*Property* Little trouble about possessions. Child does not seem to want more than he has.

May show pride in clothes but does not take good care of them, on or off.
Likes to take school products home; also likes to take own things to school.
Other people's possessions remind him of his possessions. "I have blocks."
Much less bragging about possessions than earlier.

Money Interest in money not strong.

Knows that money is used in making purchases; likes to take penny from adult to give to store-man.

Can name penny. Can count ten objects.

Truth Fanciful stories and exaggerations continue, but child begins to distinguish real from make-believe and may know when he is "fooling."

5½ YEARS—*Property* Likes to have a great many possessions. Likes to have large quantities of objects.

May collect a few miscellaneous objects: toys, fancy paper, odds and ends.

Very poor at taking care of things: leaves them around, breaks them, loses them.

Takes poor care of his things, but objects to parting with them; unless he goes to opposite extreme and is over-generous.

Some are destructive and even like to break things.

Pride and interest in clothes, but do not take good care of them.

The phrase "Play with my doll" suggests strong feeling of possessiveness.

Likes to take things from school.

Honesty May take toys or possessions of others. May also take gum or candy from stores. Now take things they really want.

Money This is a "money for candy" age. Money is important not for itself but for what it will buy.

Many have an allowance of 5¢ or 10¢ a week. May do tasks, as clear off table, help with dishes, in return for this.

Little saving; mostly spend allowance.

Spend money slowly and carefully, taking much time to decide which object they will buy. This decision usually takes place at the counter and by means of picking up and handling many different objects.

Can name penny, nickel, dime.

Truth Less exaggeration and untruthfulness. May tell fanciful stories but usually distinguishes fact from fancy.

Some said to be very truthful, their word "law."

6 YEARS—*Property* Likes to take things to school to show and share: takes work home to show parents. Takes present to teacher.

Likes to have a great many possessions but does not take care of them or keep track of them. Scatters them around house or yard. Breaks them. Loses them.

Loses toys, clothes, pocketbook money. Cannot keep track of anything.

Miscellaneous collecting and accumulating.

Some have pride and interest in clothes, but do not take care of them.

Bargaining, but little sense of value so may make poor bargains.

Honesty His needs are strong. Sense of the limits of ownership is weak. Thus takes what he sees and wants, regardless of who owns it.

Conversely may give away his own most valuable possessions.

In collecting and accumulating, may accumulate belongings of others.

Cannot bear to lose. Will cheat if necessary to win.

Money Money still thought of in terms of what it will buy: "Good Humor money."

Interest in the object that money buys, not in the money. Careless with money;

might "steal" objects that money buys; less likely to take money.

Spends money immediately and thoughtlessly. Little saving unless motivated by parent.

Many have a formal allowance, (5-10¢ per week). Most do some work at home in return for this: empty wastebaskets, take out milk bottles.

Can name penny, nickel, dime, quarter.

Truth Will deny fault if questioned directly. Falsehoods told often to evade blame.

Some are very "honest" verbally; but may cheat at games.

7 YEARS—Property Less taking things to school to show, but sometimes takes special things.

Becoming more interested in possessions and takes better care of certain things.

Some, especially girls, may take good care of clothes.

Much collecting; the goal being a large quantity.

Bartering; mostly on an "even swap" basis.

May give away own things.

Feeling of possession in relation to "school things": likes to have a school pouch or bag which contains his own pencils, eraser, etc.

Honesty Takes home school-pencils and school-erasers.

Girls may take attractive small belongings of mothers.

Money An increasing interest in money.

Most have an allowance and are interested in the fact of having it. Some earn this. Others have a basic allowance and may supplement it with earnings.

Can name all coins and tell how many pennies in each.

Many are interested in saving: defense stamps or bank account.

May also save money toward some expensive purchase, as a bicycle.

Truth Less lying than at six.

Much concerned about wrongness of lying and cheating, especially in friends

Quick to tattle of any breach of ethical code by others.

8 YEARS—Property Great interest in property and possessions.

Likes to acquire, own and barter objects: hoards, arranges, gloats over possessions

Wants a place of his own in which to keep things.

Some take good care of things, but most continue to be very careless.

Room and clothes usually untidy, but keep some things neat: desk, books, certain toys.

Likes to bring to school objects related to the school subjects.

Takes short-cuts across property of others, often damaging property.

Honesty Child *needs* what he wants. If not provided for, may take money, which is now meaningful in terms of what it will buy.

May take household money to "treat" friends.

Money "Money mad," "just loves money."

Real interest in money and in acquiring a good deal of it. Likes to earn money at home.

Knows how much he has, how much is due him, what he wants to buy, what it will cost.

Plans ahead (in his mind or from catalogues) as to what he will buy.

Saves up for expensive things; little squandering of money on trivialities, except funny books.

A high age for bartering. Ability along this line improving.

Truth Expansiveness may lead to telling tall tales and to boasting. But distinguishes fact from fancy and may size up adult to see if adult believes his stories.

Many are truthful about matters which they consider really important.

9 YEARS—*Property* Beginning to be neater and does not lose things as much as he did. Some effort (parent-instigated) at picking up room, but does not usually hang up clothes.

Usually "particular" about own things and may consider room and possessions "sacred."

Some boys interested in trading and barter.

Possessions quite numerous. Elaborate collections, carefully classified.

Honesty Has ethical standards and may be very exacting of self and of others.

May verbalize, "I'll have to be honest."

Only a few children deliberately take things not belonging to them.

If forbidden something such as comic books may read them in secret without parents' knowledge.

Many can lose in competitive games with fairly good grace.

Money Likes idea of having large amount of money to look at, to show, to count and to talk about.

Less interest in allowance. May forget to ask parent for it. Knows he can do chores to earn it, but may not care enough to, except on occasion. May be paid a certain amount for each chore.

Buys little needs (glue, crayons, clips, comics) and asks for money to pay for them. Interest in how much different things cost.

Some can save up smaller sums to attain a more costly object.

Truth Becoming more truthful. Are "essentially" truthful, but there are definite exceptions. May exaggerate, may say have washed hands, etc., when they haven't, and may support friend or sibling in a lie.

PHILOSOPHIC OUTLOOK



MAN has lived on this swirling globe for a million years. It has taken him a long time to get acquainted with himself and to become aware of the universe in which he has his being. Day before yesterday he discovered that the earth is but a speck in a vast cosmos. Only yesterday he discovered the cosmic energy contained in the atoms which constitute this planetary speck. Even with the help of Einstein he has not yet solved the riddles of Time and Space. Only a few hundred years ago America was unknown; and medieval Europe lived in a "dream of

eternity," which, Mumford suggests, did not dissolve until the 13th century when campaniles and belfries were erected to announce the passing hours. This imparted a new sense of time and tempo.

There remained, however, many childlike beliefs about human fate and evil, life and death, nature and deity. Modern science and technology reconstructed these beliefs and is still reconstructing them. Copernicus revolutionized the naive ideas concerning the canopy of heaven. Darwin gave us a new outlook on the origins of plants, animals and mankind. The *Encyclopaedia Britannica* in 160 miles of linotype gives a large scale account of transformations of human thought and action which have taken place throughout the ages. And now a new atomic age is upon us. Never was philosophy more needed!

Man is continually engaged in the task of reconciling the known and the unknown. He is forever seeking orientation to the realities and the unrealities which surround him. If he is a professional philosopher he may formulate his outlook into weighty tomes and bring a conscious logic and science to bear upon thoughts. So he organizes his reflections and arranges them into an orderly system.

Needless to say, the child from five to ten is not a philosopher in this articulate sense. Nevertheless, the modern child spontaneously develops notions about natural phenomena which bear striking analogy to the concepts of the early philosophers of ancient Greece. He also has spontaneous ideas of physical causality which do him no little credit. And he, like his forebears, is continually engaged in reconciling the known and the unknown. Even in infancy, long before the age of five, he thinks thoughts which once constituted major achievements in the mental evolution of the race. For that matter, Einstein and Newton acquired their basic physics and geometry in the nursery.

The term philosophy can be variously defined. As systemized knowledge it is the general science which integrates all sciences. At its highest levels it is a codification of man's reflections on his relations to the universe. Now children do not deliberately codify their concepts; and yet they have characteristic modes of thinking and acting, which express

their relations to the knowable universe. They have intellectual orientations and tendencies which constitute the essence of a philosophy in the making. It is difficult to draw a line between a complete and an incomplete philosophy, because even at adult levels no final philosophy has been achieved. We surely would not wish to say that the 5-year-old has no philosophy at all. His intellectual orientation to the world is already so advanced that we must trace the threads of development back to infancy to find the antecedents of his philosophical outlook.

The newborn baby is immersed in the cosmos from whence he came! But when he awakens from his natal sleep to search for the breast, and when he opens his eyes to look upon the world he is already at the threshold of the riddles of Time and Space. He promptly begins to solve these riddles at a pragmatic level. The ego which philosophers ascribe to him begins to expand; so that he steadily disengages himself from the cosmos which held him so intimately in its grasp at birth. Under the surge of growth he pushes frontiers toward the unknown. Whenever he is startled by a novelty or a surprise he reacts with a movement, a feeling, a shift of attention, an exclamation, a word, a sentence. And thereby he becomes an embryonic philosopher! We cannot begin to catalogue the cumulative conquests at his fast widening horizons; so we shall content ourselves with a condensed sketch of his intellectual progress in four classic areas of the philosophic domain: 1. *Time and Space* 2. *Ego and World Society* 3. *Life and Death* 4. *Cosmos and Deity*.

1. TIME AND SPACE

The eyes take the lead in making a pathway into cosmic space. On the very first day of life, an infant may incipiently fixate one of his open eyes upon an approaching object. During the first week he can sustain fixation on a *near* object. By the end of the first month he can fixate *far* as well as near objects. In another month he can co-ordinate both eyes to explore his surroundings with *roving inspection*. The conquest of space is well under way.

Having cleared a trail with his nimble eyes he must now use his hands to penetrate the spatial wilderness. Thereby he refines his estimates of near distances (and stops reaching for the moon, if he ever did!). When he gains better command of his legs, he will creep and walk, thereby refining his knowledge of far distances.

But practical (and philosophic) space is a manifold of many sectors, indicated by numerous prepositions and adjectives: on, under, in, above, in front of, behind, high, low, thin, thick, vertical, horizontal, oblique, etc. The infant invades and conquers these varied sectors of space through a joint use of eyes and hands, fine and gross muscles, postures and locomotion. He probes the third dimension with index finger. He learns the properties of container and contained in his poking, filling and pouring play at sand pile or seashore. He rediscovers the elementary architecture of space by building vertical towers, horizontal walls, lintels and arches with his blocks. These rediscoveries have a lawful developmental sequence, because they are inherent in the architecture of the nervous system itself.

"Nature geometrizeh," said the philosopher Plato. The infant confirms the philosopher by demonstrating a geometry of growth in the ontogenesis of geometry itself. Held in his mother's arms at the age of one year he wriggles to get *down*; he gestures to be taken *up*. At two years he has an expanding vocabulary of prepositions and place words. At three years he has a definite sense of destination. At five years he likes to make a simple map picturing a road which goes somewhere.

This is prophetic of an almost revolutionary reorientation which gets under way at six years. At that age he is still the center of the universe, but he is less space-bound, and takes a new and rangy interest in the sun, his own planet, and other heavenly bodies. At seven years he is interestedly aware that there are other places than those just "right here." At eight years he has a new awareness of foreign lands. By ten years he has a fairly comprehensive feeling of the earth as his home, the points of the compass, the significance of parallels of latitude and longitude. He has made immense strides since he first cast his eyes on a

moving shadow on the ceiling above his crib. He is spatially oriented to the *basic* geography of his world. To that extent he has a philosophic outlook.

He becomes oriented in time in much the same manner. For time has much of the essence of space, and most of our time words are space words. Time is long and short, near and far, two part and three part, before long (soon), endless; it fills an interval. Here and now, and then and there are closely united in the psychology of growth. The calendar is a kind of space map of time.

Time, however, is in a sense more abstract and inflexible than space. It has only two sectors or dimensions (backward and forward). In an unsophisticated way the infant is aware of the flow of time; but not of the units of time. By association he learns to *place* events in his accustomed surroundings and his accustomed daily schedule. (Note that the word *place* has a spatial connotation.) By experiences of *place* expectancy, he identifies *times*. By deferments he learns to wait and to appreciate units of time. His capacity to expect punctual happenings, and to wait for deferred happenings determines his elementary sense of time. As he matures he is able to manipulate and to foresee potential time in the same way that he learns to manipulate plastic space. Some individuals are more adept than others in this manipulation of time; and this, by the way, fundamentally colors their philosophic outlook as children and as adults. Some of the most durable individual differences of childhood pertain to this very trait.

A glance at the growth gradients shows that the child progresses from appreciation of personal time to inter-personal and to more abstract non-personal time. At two years he comprehends the words "soon," "wait," and "pretty soon," particularly if the inflection is emotionally reassuring. It must be a tangible and prompt transaction. At three years there can be more interval in the bargain, and the child knows what he will do on the morrow. At four years he uses past, present and future time words with similar facility. At five years he is so symmetrically oriented in both time and space that he seems to live in a relatively stable world of *Here* and *Now*.

At six years he takes a new type of interest in the ages of young and old, and in the babyhood of his mother. This is more than a perception of *duration*. It is a beginning apprehension of a *time cycle*,—a higher order of insight, a more philosophic outlook. At seven years he not only tells time by the clock, but is interested in time schedules,—a cultural kind of time. At eight years he likes to consult the schedules as they are posted on the bulletin board. He is getting time bearings in a restricted province. But he is still color blind for historic time. For all he knows, George Washington is mentioned in the Bible.

At ten years, however, the child is better oriented with respect to historic time, and he is yet more precisely oriented to local community time, life cycle time, and personal time. He is at home with units of time. He knows the date; the day of the week; the exact minute of the next program on the radio. His timing and tempo are more highly geared than the bells of the medieval campanile. As he grows older he will move nearer to Emerson who enjoins us to have faith in the years and the centuries, so that we may restore the minutes to their proper perspective. Philosophy again!

2. EGO AND WORLD SOCIETY

Since the so-called ego and the social organizations of mankind have been a necessary theme for philosophers, we must bring this subject, briefly, into consideration. By the ego we mean the personal self,—and the non-personal,—the individual who by progressive detachment becomes a partial entity in the vast human family.

The process of detachment is slow and also paradoxical; for the ego takes form only as the infant becomes more and more aware of other individuals. The process begins with the mother. We shall not repeat this oft told tale. The drama of reciprocal identification, projection, and separation ordinarily takes place in a household. The presence of other persons helps the baby realize his own status. This psychological mechanism is a little like stereoscopic vision. The baby senses himself to be in others; but he also senses himself in his own

physique; the two experiences offset each other; they are sufficiently different to build up a sharpening image of his own integral self.

As early as the age of 32 weeks he senses strangers as something different from familiars; although he does not recognize himself in the image which stares at him from a mirror. At two years, he has a heightened sense of self-identity. He calls himself by his own name; he calls all men and women "mommies" and "daddies"; he calls every child "baby." And he has taken one short step beyond the confining boundary of the household: he feeds and toilets a doll. Even if he prefers a teddy bear we may consider that he has begun to relate himself actively to other selves. He enjoys simple pictures of persons as well as of things. At three years he likes to hear stories about them,—a definite step beyond egocentrism.

The noteworthy bargaining ability of the 3-year-old must again be cited as a symptom of a changing (philosophic) outlook upon the world. At five years he likes to feel grownup, and significantly he asks "Could a baby do this?" meaning, of course, that a baby couldn't.

At six years the child is emotionally in a paradoxical, or shall we say a two-way state, so far as ego and the world are concerned. He is certainly the center of his universe, even though he is emotionally embroiled with his mother. And he is inordinately interested in himself; he is intrigued with his own babyhood, and inquisitive about his anatomical make-up. Notwithstanding, he is eager to participate in the world's work, and is earnestly concerned about his school work. From the latter standpoint he is not so egocentric after all.

The world is widening. At seven years he may be provincial enough to want his own set place at the table or in the automobile; but he is also seeking a place orientation in his school and community. He shows a dawning interest in government and in civilizations. In another year this interest comes to expansive expression. The 8-year-old, although his temperamental traits of individuality are now more marked than ever before, identifies himself with foreign peoples, and foreign cultures. He can hardly wait to grow up.

The 10-year-old has begun to read adult magazines, and is reflecting seriously on the vocation he will follow when *he* is grown up. Accordingly, he reads biography and history with deepened perspective. He listens to the radio for communications from the outer world. In time of World War he follows the news commentaries with a factual, almost adult interest. He consults maps. He makes surprisingly few aggressive remarks about the enemy; although, we know that the enemy successfully trained 10-year-old boys in the lethal techniques of war, including rifle, machine gun and grenade.

The American 10-year-old considers in his mind whether he would prefer Army, Navy, Marines, aviation, radar, etc. He helps in the civilian aspects of war work. But fundamentally his psychology is preparing a foundation for a potentially peaceful philosophic outlook on a world society.

He has made excellent progress since his earlier years.—“What do soldiers do?” At the age of three his answer was “Dey march!” At four he said “They fight with guns!” At five, he may have asked a thoughtful question about good Japs and bad Japs. At six, he takes a firmer stand: “Why, Hitler is so dumb, I bet he can’t even spell cat.”

Philosophic outlook in the making!

3. LIFE AND DEATH

The subject of war naturally brings us to another great theme in the domain of philosophy: the origin of life and the meaning of death. It took no little insight on the part of our racial forebears to make a biological distinction between life and death; and there is a period in the development of the child when he unites the two phenomena so closely that he believes in reversible death. This interesting notion rises in the mind of the 5-year-old child, at the very time when the distinction between the quick and the dead dawns upon him. He recognizes the immobility of the dead. His attitude is factual, unemotional. He may

even do a little experimental killing of lower forms of life. But his concepts are vague. He does not think of himself or of the aged as dying. He has an inkling of finality, but does not sorrow. The idea of the reversibility of death is, of course, implicit in primitive and modern religions. Religious beliefs are akin to philosophies.

The 4-year-old has a very limited and almost purely verbal concept of death. The 3-year-old has little or no understanding of death; but he is making a definite approach to the problem of the origins of life. He does so through his interest in babies. He likes them; he wants the family to have one right away. He may ask groping questions: Where does the Baby come from? Where was it before it was born? What can the Baby do when it comes? The questions are not as profound as they seem to be on the surface; but they do denote an interest in origins. Mythologies which express the philosophic outlook of primitive peoples are replete with theories of origin and genesis. The 4-year-old, living in a commercial culture may cling to the idea that babies are purchasable; or in his more private thinking he often maintains that the baby is born through the navel. The 5-year-old is somewhat matter of fact about the birth of babies, as he also is about the finality of death. In a vague way he associates movement with life; and probably does not make a consistent distinction between animate and inanimate objects when the latter seem to have the power of movement.

But with the forward pulse of growth which comes at six years, the child has a new awareness both of life and death. An appreciation of the negation of death serves to sharpen his perception of manifestations of life. He shows a more concerned interest in babies and asks many questions about them. He makes general inquiries about the process of gestation and of birth. He may show a beginning interest in the reproduction of animals.

At seven his interest is less outspoken and more reflective. He does not need the concrete stimulus of an actual baby to start a short train of theoretical reflections. The mechanical aspects of birth may chiefly engage his attention.

The 8-year-old characteristically shows a definite expansion in the scope of his comprehension. He sees the necessity of a long uterine period of growth prior to birth; and he is beginning to understand that the father plays a part in procreation. His thinking, however, is relatively concrete and he may retain naive notions about the floating clouds, the current of rivers, the action of the wind and the movements of sun, moon and stars.

The 10-year-old is less naive. He still thinks vaguely of forces behind all movements; but he has grasped the significance of spontaneous movement so he arrives at the rationalistic conclusion that animals—and plants—are endowed with life. For all practical purposes he has made a distinction between animate and inanimate. The distinction cannot be final for even now scientists and philosophers are debating whether the protein molecule of a virus is animate or inanimate.

Death poses the distinction in new forms. As already suggested, the 6-year-old is becoming more aware of the meaning of death, emotionally as well as intellectually. Self- and mother-centered as he is, he begins to worry about his mother's dying and about the separation which will result. In an aggressive mood he may invoke death upon parent, or playmate. His vehemence may astound; but often it is purely verbal. However, he feels the passing shadow of the curse of Cain; for he is acquiring the idea of death by violence,—death as a condition which results from killing! (The war has not delayed this insight.)

For the 7-year-old the death idea becomes somewhat more personal. He suspects that he himself will some day die; but since this suspicion is in tender and timid beginnings he also denies that he will die. While Six might verbally visit death upon another, SEVEN, true to his inwardizing psychology, may verbally complain, "I wish I were dead." But even more than Six he has a realistic curiosity about the objective appurtenances of death: coffin, burial and cemetery.

The 8-year-old progresses from an interest in graves and funerals to an interest in what happens after death. His comprehension is more general, and he acknowledges that "All men must die."

The 10-year-old accepts this philosophic dictum more completely. He confronts the fact of death as a natural phenomenon; he does not limit his interest to its appurtenances and consequences. He thinks of life as having a physiological basis in nutrition, growth, blood and breathing. Death comes when these essentials fail. Death is a negation of life, a biological process. True to his maturity traits, the 10-year-old again approximates and foreshadows the outlook of the adult.

4. COSMOS AND DEITY

The newborn infant, as already suggested, is immersed in the cosmos. Perhaps that is the reason he has about him an "air of infinite wisdom" which tends to vanish when mere mortal intelligence develops.

Thoreau hints as much: "In a sense the babe takes its departure from Nature as the grown man his departure out of her, and so during its nonage is at one with her, and as a part of herself."

Our growth gradients attempt to tell something about how this generic Babe disengages himself and makes the developmental departures toward a state of maturity where he can contemplate the cosmos which gave him birth! It is a long journey which begins with his first steps in the early conquests of time and space; which continues in his endless questions: What's that? Why? How?; and which ultimately brings him to the sacred and the secular literatures that deal with Nature and with God. The culture answers his childhood and adult questions through sciences and religions.

The cosmology of the infant is delimited by the nursery. His world system consists of furniture, feeding utensils, crib, clothes and domestic trappings. In his perambulator he may note the waving trees against the horizon; he glimpses the come and go of other vehicles; he senses vast masses of houses against the sky: but, as yet, he is scarcely conscious of either earth or sky for he makes no distinction between the two. He is space-bound by what immediately impinges on his needs, his economy.

With increasing powers of locomotion his hitherto constricted world

system enlarges and takes on structure. He walks on curbs and walls with a thrilling sense of distance and destination. He begins to know that pathways and streets lead somewhere. He may name his own street, his village or city, neighboring cities. In time the drug store, the market place, nursery school and kindergarten become part of his "cosmology."

If he could draw a map of his universe we can be pretty sure of what he would include; because his cosmology, up to the age of five, is highly personal.

At six and seven his interests become somewhat more impersonal. He displays at least a picture book interest in foreign places; he makes inquiries about both the astronomical and theological heavens. In his efforts at orientation he tries to ascertain the precise spatial location of an overruling deity. He is curious about the elements, the earth's crust, fire, the wind, the weather, clouds, the melting of snow and ice, the origins of rivers, lakes and sea, mountains and deserts, flora and fauna. A tree is no longer a mere moving blotch against a background. It is a plant. But how did it get there? Where does the wind come from? Or does the tree make the wind by nodding? What are stones made of? And, Mamma, where did you find me? Where was I when you were at school? And *who* took care of the very first baby? And does Superman make supermen?

With such a welter of questions, one might wonder how the child is ever able to escape confusion. And yet he fashions for himself an orderly universe. To begin with, he doesn't ask the questions all at once. He asks in relation to a specific spot on the frontier of *his* unknown. If you try to tell him too much and too early, you are more likely to bewilder him. He is not lost; he simply wants to take one step; that is the *next* one, and always one at a time. He would not ask the questions at all if there were no immanent order in the universe of which he is a very important fragment. He feels himself in a world of lawful forces, some of which he controls. For this reason his questionings and his thinking take him toward and into the realms of the natural sciences and of cosmogony. In his naivete he may even ask, "Well, who made God?" or "Was God

born?" And a 7-year-old skeptic argues, "I have never seen God in school."

When skepticism makes its appearance in a child's thinking, we may be sure that the mind is becoming conscious of itself. This leads the child to an increasingly objective view of Nature. At the same time the sense of self is becoming more defined; and the concepts of Deity undergo corresponding changes. During the earlier pre-school ages, the child's relation with the cosmos is so close, and in Piaget's sense, so egocentric, that he attributes purpose and feeling to the events of Nature. Many of the child's spontaneous notions are then probably colored by animism; and occasionally by magic. Frequently his notions bear a striking resemblance to some phase of primitive mythology.

The tendency toward "dynamistic" as opposed to rational thinking doubtless varies with the temperament of the child, as well as with age and circumstances. An imaginative child is likely to project himself even into lifeless, physical objects for the playful fun of it; because the mind can play as well as work. Edmund Gosse in his autobiographic volume, *Father and Son*, supplies us with an engaging example, at the normatively proper age of six: "What are the resources of a solitary child of six?" he asks. "Being so restricted then, and yet so active, my mind took refuge in an infantile species of natural magic. . . . I formed strange superstitions. . . . I persuaded myself that if I could only discover the proper words to say, or the proper passes to make I could induce the gorgeous birds and butterflies in my Father's illustrated manuals to come to life and fly out of the book, leaving holes behind them."

A pedestrian mind would not have had the wit, though it might have the primitiveness, to indulge in such a fancy. For that matter, it might be pointed out that nothing would have more surprised the 6-year-old Edmund, than to find that his magic worked; and that the engravings came alive, for even at that age he was well grounded in the elementary realities of the physical world. ·

Within the limits of his intelligence and experience, however, the child of six and younger is capable of drawing rational deductions; and

he can think in the non-mystical terms of physical causality. At first he thinks of specific causes. By the age of ten he may think of general, mechanical causes. He is less naive; his errors of interpretation are fewer. His modes of thinking and his attitudes toward cause and effect become truly scientific in their essence. But the most remarkable feature of his intellectual development is not an increase of knowledge and accuracy. More remarkable is his interest in causes, which expresses itself in "Why?" even before the age of three.

Whence this Why? which becomes particularly insistent at the ages of four, five and six. It is an untaught tendency of his growing mind. It is as instinctive as his play and phantasy. It resembles a startle response evoked by new or strange situations, and is based on the inborn capacity to wonder.

The corollary of "Why" and "How" is "I don't know" and "I can't." The child's questionings reflect and direct the growth of his critical ability. His sense of self becomes more discriminating. He no longer considers himself all powerful; and gradually, or perhaps suddenly, he perceives that his parents are not all powerful. This necessitates a revolutionary revision of his philosophic outlook. He looks upon the world and upon the household in a changing light.

The disillusionment comes as though it were a natural and necessary mechanism for intellectual, as well as emotional development. Edmund Gosse found it so, and was confirmed "in the opinion that certain leading features in each human soul are inherent to it, and cannot be accounted for by suggestion or training." He relates how the *consciousness of self* came to him as a force and as a companion; and how it came as the result of a household incident, in which his mother corrected his father for saying something which was not quite true. And Father accepted the correction!

"Here was the appalling discovery, never suspected before, that my Father was not as God, and did not know everything. The shock was not caused by any suspicion that he was not telling the truth, as it appeared

to him, but by the awful proof that he was not, as I had supposed, omniscient."

"My Father, as a deity, as a natural force of immense prestige, fell in my eyes to a human level. In future, his statements about things in general need not be accepted implicitly. But of all the thoughts which rushed upon my savage and undeveloped little brain at this crisis, the most curious was that I had found a companion and a confidant in myself. There was a secret in this world and it belonged to me and to a somebody who lived in the same body with me. There were two of us, and we could talk with one another. It is difficult to define impressions so rudimentary, but it is certain that it was in this dual form that the sense of my individuality now suddenly descended upon me, and it is equally certain that it was a great solace to find a sympathizer in my own breast."

When Edmund Gosse grew up he became an eminent critic. It is not surprising, therefore, that he had an acute sense of self in his childhood. But all children, even the less gifted, pass through a comparable ante-adolescent phase during the crisis of the sixth year or thereabouts. The dethronement of *Paterfamilias* is, after all, not too drastic. Life with father goes on. The qualities of omnipotence and omniscience are perpetuated in the child's developing concepts of a Heavenly Father,—and also in a popular figure who comes down a chimney once a year. With good reason Santa Claus is sometimes called Father Christmas. He is a true folk phenomenon. At his best he remains a jolly and kindly embodiment of a beneficent parenthood.

Perhaps our culture should do more to preserve him, by preventing over commercialization, and also over multiplication; for the susceptible believer is subject to numerical and other confusions. But usually a child can assimilate, adore, and in time deny him without suffering any scars of disillusionment. Indeed this substantial saint, in contributing to the spirit of Christmas, assists the child to attain a more abstract concept of a spiritual deity.

The prevailing culture and the religion of the household have 2

marked effect upon the child's ideas of God; but the general character of the ideas is basically determined by developmental factors.

These factors are neatly reflected in the growth gradients for the Santa Claus myth. Up to the age of two-and-a-half years the physical Santa is usually feared. He is a strange and formidable threat to the child's security. A year later he begins to be somewhat meaningful and interesting. Most 3-year-olds are aware of Santa long before they are aware of God. The 4-year-old is a true believer and accepts every detail of the myth. The 5-year-old embraces the realism of Santa's clothes, his laugh, his reindeers. The 6-year-old hears doubtings, but he fiercely repels all suspicion. His belief is more emotional; his enjoyment more intense. If he has a lively mind he images not only old Santa himself, but Santa's wife, home, workshop and the ledger in which the names and deeds of good children are enrolled.

Reflective SEVEN has moments of skepticism; or we should say, moments of constructive criticism. His natural science (which includes the measurement and displacement of physical bodies) does not permit him to believe that Santa comes down the chimney. He may repudiate still other details but he adheres to the core of his faith and of his enjoyment. At age eight, the notion of Santa Claus is more etherealized, but it is by no means surrendered. The spirit of Christmas is taking shape as an observed and felt reality.

By the age of nine or ten, the Santa myth has been generally abandoned; but who can doubt that it may play an enriching role in the development of personality? The child's reactions to the myth reflect at least the mechanisms and the stages by which he reaches the higher levels of religious thought. In the early pre-school period he regards his parents as omniscient, but he admits Santa into his pantheon, and ascribes to him parental attitudes when a philosophical need arises. Coincidentally he admits angels and heaven into the gallery of his imagination. (His imagination and interest are particularly rich at the age of six.) Parents, in the child's outgrown belief, once made everything in the world. Now there are other agencies; and even Santa may

prove to be a bridge to the concept of God as a creator and governor. The 10-year-old is less naive, more rationalistic. He ascribes natural origins and natural processes to Nature and to Man, and over the cosmos he is erecting a supreme deity. He has attained a preliminary stage of maturity where he can combine science and religion in his philosophic outlook.

One of the great tasks of postwar education is to impart the life sciences and the physical sciences in a manner which will preserve both rational and spiritual values.

GROWTH GRADIENTS

§ 1. TIME

18 MONTHS—Child lives in the present. Finds it difficult to wait.

Uses no time words but responds to "now."

Slight sense of timing: sight of juice and crackers may bring him to the table.

21 MONTHS—Continues to live in the present. His chief time word is "now."

May consider that a certain event, i.e. father coming in, is the signal for next event (supper). Even though father may have come very early, child expects supper at once.

Responds to "In a minute."

Improved sense of timing: may sit at the table and wait for juice.

2 YEARS—Child still lives chiefly in the present, but begins to use words denoting the future: "gonna," "in a minute."

Will wait in response to: "wait," "pretty soon."

Has several words indicating present time: "now," "today," "aw day," "dis day."

No words for the past but begins to use past tense of verbs, often inaccurately.

Comprehends simple time sequences as implied in, "Have clay after juice."

2½ YEARS—Child may use about twenty different time words.

Now uses freely words implying past, present and future time. Has several different words for each.

Words for the present: "day," "morning," "afternoon."

Future: "Some day," "one day," "tomorrow," "pretty soon."

Past time is usually designated by "last night."

Freely uses names of the days of the week although inaccurately.

3 YEARS—Most common basic time words now in child's vocabulary.

More time words added to vocabulary between two-and-a-half and three years than in any other equal period:

Many different words now used for past, present and future. Most for future.

Adult can bargain with the child, can persuade him to wait for things.

Expressions of duration: "all the time," "for two weeks," come in.

Pretense of telling time and spontaneous use of clocktime phrases, usually inaccurate.

Much use of the word "time" alone or in combination: "It's time," "lunchtime."

Child can tell how old he is, when he goes to bed, and what he will do next day.

3½ YEARS—Great variety of expressions indicating past, present and future now used spontaneously, to about an equal extent.

Many complicated expressions of duration: "for a long time," "for years," "a whole week," "in the meantime."

Increase in refinement of expression: "It's almost time," "a nice long time."

Expresses habitual action: "On Fridays."

May refer to future happenings as if in the past: "I'm not going to take a nap yesterday."

Ability to answer questions about time not much increased since three years.

4 YEARS—Spontaneously speedy, but slows down under pressure. If urged to hurry, usually goes more slowly.

Has reasonably clear understanding of when events of the day take place in relation to each other.

Past, present and future words continue to be used freely and about equally.

Many new time words or expressions are added.

The word "month" comes in; also such broad concepts as "next summer," "last summer."

5 YEARS—Child lives in the here and now.

Knows when events of day take place in relation to each other.

Dramatic house play involves sequences in time.—routines of the day.

Most of the time words commonly used by adults now in the child's vocabulary

Free verbal handling of the more common aspects of time.

Can name days of the week, at least in rote fashion.

Can answer questions such as "How old will you be on your next birthday?", "What day is it?"

Cannot conceive of not being alive, of dying, or of anyone living before him.

Interest in clocks. Likes to play with toy clocks.

Interest in calendars; likes to find birthday and holiday dates.

6 YEARS—Child tends to dawdle in most routines.

Increasing knowledge of duration. Can discriminate roughly time intervals; but

"You may play for twenty minutes" is not useful unless implemented.

An understanding of the seasons, in terms of activities suitable for each.

PHILOSOPHIC OUTLOOK

If asked, "What is Time?" may say "Time to get out of bed."

Interest in his and/or mother's babyhood.

Can answer questions such as "What time do you go to school?", "How long do you stay in school?", "What do you do in the spring?"

Begins to understand that oldest people usually die first.

Some interest in time being different in different parts of the world.

May be mixed up about past and present. Clings to the old yet scoffs at it, and wants the new.

7 YEARS—Adult needs to be aware of child's natural tempo and give him time for performance.

Child may dawdle almost until deadline then speed up and finish with a spurt.

Interest in school schedule as to what subject follows what.

May be afraid of being late for school.

Can tell what time it is; also how many minutes past, or of, the hour.

Can tell what season it is; what month it is; how many minutes in an hour.

If asked "What is Time?" may answer, "Time is to be ready for school."

Uses concepts such as how many years till some event, spontaneously in thinking and in conversation.

8 YEARS—Child is very "speedy" and likes anything that is speeded up.

"Can't wait" for future events or to be grownup.

Likes to consult bulletin board about school schedule.

Can tell time, but still depends on parent to be told that it is bedtime, etc.

Can tell what day of the month it is.

Can name months; can tell what year it is.

Asked "What is Time?", may reply, "What part of the day it is; what time it is."

Beginning of interest in primitive peoples and in times past.

Not very clear about times past; thus not know whether or not George Washington is mentioned in the Bible.

9 YEARS—Child can tell time but does not as a rule take responsibility of depending on his watch to know when to do things.

Practical time sense not too good. Cannot report in any detail what his daily school schedule is. Can tell when recess is, and when he goes home.

Can telephone home if he is going to be late.

May plan schedule of day, or may plan way ahead to an adult future.

Child may feel pressed for time, he is so busy.

May be challenged competitively by timing of a performance.

Interested in biography: the life sequence of the individual (9-10 years).

Marked interest not only in history but in pre-historic times.

Will do a task if told how much there is to do, and how long it will take.

§ 2. SPACE

1 YEAR—Wiggles for "down." Gestures for "up."
Plays "peek-a-boo."

15 MONTHS—Says "up."

18 MONTHS—Says "down," "off," "bye-bye," "all gone."
Out for a walk, runs ahead of adult and explores by-ways.
Can obey two directions with ball, putting it on chair or on table or giving it to mother.

21 MONTHS—Says: "on," "all gone," "big," "here."
Points; pulls person to show things.

2 YEARS—Says: "up high," "in," "out," "there," "where," "go way," "up here," "fall down," "turn around," "other side."
Likes to walk on curbs and walls.
Can obey four directions with ball: on chair, on table, to mother, to examiner.
In play may use pattern in rug, etc. as road for car.

2½ YEARS—Says: "to," "home," "way up," "right here," "in here," "in there," "fall," "under the table," "around the table," "to New York."
Interested in having things in their places. Helps put things away.
Out for a walk, begins to have thought of destination.

3 YEARS—Says: "in the train," "back," "over," "over here," "fits," "gone away," "around," "in New Haven."
Can tell what street he lives on but usually not the number.
Can carry out commands in regard to: over, crooked, under, big, high, long, tall.
Puts ball on, and under chair.
Out for a walk, definitely has destination in mind. Always likes to follow the same route.

3½ YEARS—Says "go there," "go" meaning belong; "found," "in school," "over there."
Puts ball on, under, in back of chair.
Can tell what street he lives on and what city he lives in.
If asked how he gets to a certain place, will answer "on the bus," "in the car."
Cannot tell by what route.

4 YEARS—Uses space words more exactly, and in combinations.
Carries out commands in regard to: on top, behind, bumpy, deep, pointed, shallow.
Puts ball on, under, in front of, behind chair.
Plays hide-and-seek.
Makes road in sand for his car. Dramatic rather than spatial use of "store," "home" etc.

Goes on errands outside home, without crossing street. Visits neighbors.

Out for a walk, runs ahead of adult and can wait at crossing.

Likes to go "different" ways when on walks.

If asked how he gets to a certain place, may try to describe the route. More likely to say "the goat way" or "by the ball place."

5 YEARS—Child is here and now. Very literal and factual. Also focal.

Child remains close to home base; close to mother.

Needs things in close juxtaposition spatially.

Needs parent to be right where he himself is; at his level.

Is interested in his home and in his immediate neighborhood.

Likes to do errands around the house; will go to the store usually accompanied by an adult. Can cross streets with traffic lights. Can learn to go to kindergarten by himself.

Can point out simple routes which he takes between near and familiar points.

Can carry out commands in regard to: few, forwards, backwards, tiny, smooth, high.

Likes to trace journeys on maps and make simple maps indicating the route he takes to school etc. Indicates specific landmarks.

Interested in the space which is here but not so much in spatial relations.

Is interested in distant cities and states if someone he knows is there.

Likes to go on excursions with his mother.

6 YEARS—Environment is expanding. Now includes relationships between home, neighborhood, and an expanding community.

Home and school both very important, but child has trouble orienting to the combination of these two different worlds.

Home interests now include: people, keeping house, pets, animals, outdoors, amusements, sources of food, preparation of food, clothing, books, holidays.

School interests now include: materials, equipment, library, various rooms, playgrounds.

The child himself is the center of his universe, but he is also interested in the sun, moon, planets, the whole world.

A rangy orientation to schoolroom: oriented to the whole room.

A minimal, picture-book type of interest in children of other lands.

Marked interest in Heaven, how you get there, etc. A contrasting interest in the Devil and Hell.

Very undifferentiated in regard to space as in all fields.

Can distinguish left and right on own body, but not on bodies of others.

May be able to tell points of compass from a familiar starting point; can name nearby streets.

May begin to realize that same programs come over other people's radio as over his own.

Some interest in what rest of school is like. Enjoys exploring school *with* his group

If he goes on shopping excursions, must buy something.

7 YEARS—Somewhat similar to six with deepening of meanings and more understanding of relationships throughout the whole community.

School and home both important.

Community interests include details about: grocer, policeman, fireman, etc.

An interest in the elements: earth's crust, stones, heat, fire, sun, geology.

Not ready for study of far times and places (Indians and foreign countries).

Interest in God in Heaven now more clear and more spatial.

In school is oriented toward the teacher.

Interested in having his "own place."

Interested in the fact that "there are other places than just right here."

Marked improvement in understanding of orientation in regard to cardinal points of the compass.

Can play hide-the-thimble.

Can go from home room to another familiar room, but wants specific directions.

8 YEARS—Definite expansion into deeper understanding of wider community relationships.

Foreign countries and world relationships are better understood.

Beginning of interest in primitive people and times past: Indians, Pilgrims.

Child is expansive and evaluative; adventurous; willing to try new things and new places.

Interest in barriers: likes to set his own barriers.

Out of bounds encroaching on neighbors' property. Likes short cuts.

Child is speedy: covers much ground—in every way.

Interest and apparent understanding (to his own satisfaction) of going to Heaven when he dies.

Can distinguish right and left on bodies of others.

Can go to city on bus if put on and met by someone.

9 YEARS—Can go to familiar places on bus, getting on alone; or go downtown alone.

Interest in expanding community life: community problems of health, life, property; mercantile businesses; manufacturing industries; agricultural industries; transportation; weather; animal and plant life in community; holiday and seasonal activities.

Environment widens to include the whole earth. Studies culture outside his own Understandings, attitudes and concepts become world wide: China, South America, Russia.

Communication with somewhat distant places through correspondence.

Likes geography (maps) and history. Other countries and other times.

Beginning to like biography, (whole development of one person).

Strong interest in details of life in foreign countries and in primitive times.

§3. LANGUAGE AND THOUGHT

4 WEEKS—Cries.

Makes small, throaty noises.

16 WEEKS—Laughs aloud.

28 WEEKS—Polysyllabic vowel sounds.

Crying—"m-m-m."

40 WEEKS—One word. Also "dada" and "mama."

"Bye-bye" and "pat-a-cake" gestures.

52 WEEKS—Two words besides "dada" and "mama."

Gives a toy on request.

15 MONTHS—Vocabulary of 4 or 5 words including proper names.

Begins to use jargon.

Names object; pats picture.

18 MONTHS—Uses and responds to a few favorite words: "Oh my," "all gone," "bye-bye," "tata."

Gestures help to reinforce language.

Jargon predominates. Vocabulary of about ten words.

Needs to be handled physically more than through words.

In examination child refuses by shaking head "No," says "No," cries, refusing to answer.

2 YEARS—Jargon dropping out; 3-word sentences coming in.

Vocabulary increasing rapidly. May include from 12 to 1,000 words.

Verbal handling of child begins to supersede physical handling. Certain words can be used effectively: "need," "another," "again."

Speaks and should be spoken to in short, simple phrases: "Have clay after juice."

In examination child refuses by shaking head "No," says "no," refuses to answer, suggests other materials by gesture.

2½ YEARS—Vocabulary increases rapidly. Language now a useful tool for child.

Spontaneous language often rhythmical and repetitive.

Long monologues with fluent use of language.

Verbally asserts domination over members of family.

Uses such forms as I, me, you.

More "time" words appear in next six months than during any other equal period.

Adult now handles child by words instead of physically.

Key words effective in handling child: "need," "has to have," "when you are finished," "it's time to."

Ritualistic. Likes to hear same story over and over.

In examination child refuses situation by shaking head "No," saying "No," asking verbally for other materials.

3 YEARS—More command of language. Uses language fluently and with confidence.

Can use words to control and can be controlled by words.

Interest in new words. Adult can use key words effectively in handling the child: "surprise," "secret," "could help," "might," "new," "different," "maybe."

Listens when reasoned with.

Listens with interest to adult conversations. Increasing span of interest in listening to stories.

Stuttering ($3\frac{1}{2}$ years).

In examination child refuses situations by saying "I don't know." Suggests other materials. Verbal reference to mother.

4 YEARS—Out of bounds verbally: talks a great deal; exaggerates; boasts; tells tall tales.

Talks with and about imaginary companions.

Much questioning: "Why?" "How?" as much to keep conversation going as seeking information.

Profanity, mild obscenities; verbal play about elimination.

Calls names; threatens; uses slang.

Likes nonsense words; silly language and rhyming; new and different words.

Many grammatical mistakes, and misuse of words.

Can listen to stories and being read to with sustained interest.

Less need for key words. Adult can talk to child more in man-to-man fashion.

Whispering may be effective and child may be willing to whisper an answer which he will not give aloud.

In examination child refuses situations by saying "I can't," "I don't know."

Boasts about irrelevant subjects, questions examiner; says "You tell me," "Hey," "Ow."

May say that he thinks with his mouth or with his tongue.

5 YEARS—Likes to talk and will talk to anyone. Some talk "constantly."

Interest in using new and large words; interest in the meaning of words.

Asks, "What does . . . spell?"

Innumerable questions; now really seeks information.

Grammar now reasonably accurate; usually one or two inaccurate forms. Criticizes wrong use of grammar in others.

"Loves" to be read to.

Uses language conformingly: "Is this the way to do it?"

In examination, begins to use language thoughtfully: "I think," "I forgot." Evaluates tasks: "That's hard," "That's easy."

Can define simple words.

Difficulty in distinguishing between fantasy and reality.

"Magic" is an accepted answer to the child's "How" questions.

May believe that everything active is alive; that man made everything.

May say that he thinks with his eyes.

Figures things out for himself. Makes own generalizations after even one occurrence of an event. If both his grandfathers died first he may ask, "Do daddies die first?" If by chance he has been told that two brown dogs were females and two black ones were males, he will conclude that all brown dogs are female and all black ones are male.

6 YEARS—Uses language aggressively: calls names, threatens, contradicts, argues.

Slang and mild profanity.

Asks many questions. Very talkative.

Uses telephone. Some can dial.

Likes to use big words.

Usually good pronunciation and fairly accurate grammatical form. Can detect own mistakes and may accept correction.

Considerable stuttering, especially in boys.

In examination, is conscious of multiplicity of tasks: "So many words." Interest in beginnings of tasks: "I can't do it far," "I'll go as far as I can."

Can tell differences between two simple objects.

Increased ability to differentiate fantasy and reality.

Interest in magic strong: child plays that he is magic, has magic ears, etc. Counting is magic. Puts baby teeth under pillow and believes that fairies substitute pennies.

Everything that moves may be thought alive in contrast to that which is inert; child believes that God made everything.

7 YEARS—Uses language complainingly: nobody likes him, people are mean and unfair, he has nothing to play with.

If angry, may retreat into silence instead of, as earlier, into angry verbalization.

Interested in meaning and spelling of words. Some use of pictorial dictionary.

Considerable social telephoning to friends.

Use of slang and clichés.

Variable pitch of voice: voice generally loud, but may speak softly or mutter complaints.

Reading, listening to radio, silent verbal planning.

In examination estimates own ability: "I've never done that." "I guessed it."

Criticizes own performance: "What's the matter with me?" Delays: "Got to think it over." Interest in endings: "I've got all up to here."

Can give similarities between two simple objects.

Now relates thinking to head or mind: "You have to think it up in your head"; "It went out of my mind."

Great interest in magic, wishing stones, tricks.

May play at magic, that he has a magic wand, or that he "is" magic.

May believe that everything which moves is alive and that God made everything.

8 YEARS—Out of bounds verbally (as at 4 years): talks a great deal, exaggerates, boasts, tells tall tales.

Uses language fluently, almost as adult does.

Much social use of telephone.

Some slang and profanity; raises voice when angry or tired.

Reading and radio interests strong.

Good pronunciation and good grammar, as a rule.

Beginning of code language; use of Pig Latin or Double Dutch; secret pass-words.

Can give similarities and differences between simple objects.

Differentiation between fantasy and reality established.

Less belief in magic but interested in magician's tricks and may like to perform simple card tricks.

Can verbalize ideas and problems.

Begins to understand cause and effect relationships.

Distinguishes between original and acquired movement: to be alive is to move by one's self.

9 YEARS—Language now used more as a tool, less for its own sake.

No longer out of bounds verbalization as at eight years.

May return to many incorrect grammatical uses.

Writes out lists and plans.

Uses language to express subtle and refined emotions: disgust, self-criticism.

Reading and radio interests increase.

Considerable verbal criticism of parent's actions.

Extended use of code language.

Emergence of independent critical thinking.

Increasingly realistic conception of the world; does not like fairy stories.

Less belief in magic but strong belief in luck, and some superstition.

§4. WAR

2 YEARS—No answer to question, "What do soldiers (sailors) do?"

2½ YEARS—If he answers question, "What do soldiers (sailors) do?" will reply, "De^y march," or merely, "March."

3 YEARS—Replies to question, "What do soldiers (sailors) do?" "March all around," "Oh dey - - guns."

3½ YEARS—Replies to question, "What do soldiers do?" "They march—that's all I can figure out," "Wave the flags."

Replies to question, "What do sailors do?" "Sail," "Wear little white hats," "Shoot the Japanese," "Teach the WACS to be Coastguards."

4 YEARS—Replies to question, "What do soldiers do?" "March," "Go to war," "Fight the Japs with guns."

Replies to question, "What do sailors do?" "Sail in boats," "Oh sometimes they're

PHILOSOPHIC OUTLOOK

in sailing boats but when they're not in sailing boats they're walking with girls or somebody."

5 YEARS—Matter of fact questions about war in Europe, soldiers, what soldiers do, about Germans, Japanese, Hitler, the Nazis.

Tells, without emotion, that father is "in the war" or "in the army."

Thoughtful question: "Are there good Japs and bad Japs? You can't tell me all the Jap children are bad."

Plans about how to stop war: "Get up behind Hitler when he isn't looking and shoot him." Three way plan: a) "Put up a red light"; b) "Take from the people the things they need, then they won't be able to fight"; c) "Pass a law, tell them they shouldn't hurt each other."

Only a few seem afraid of bombs and air raids.

6 YEARS—An aggressive, angry response toward Japanese, Germans, Hitler.

Interest in the badness of the Germans.

Much war play in some detail: drill, march, shoot; airplane and gun play.

Aggressive talk, belittling the enemy.

Continued plans, as at five years, for defeating enemy: "Bomb Japs while they're asleep."

Some show interest in globe, maps, atlas—lands where fighting is going on; especially if father is in the armed forces.

A few worry or dream about bombing, or other aspects of war.

7 YEARS—Beginning in many, of worries and fears about the war. Some dreams about the war. One child dreamed that a spy asked her, "Do you like your government?" Much fear of spies.

War play continues stressing guns and airplanes.

Some boys like war movies and war funny books.

Likes to buy defense stamps.

Likes to collect paper, scrap etc. under direction, with whole school class.

8 YEARS—War play continues, elaborately.

Does not seem to worry about war, though interested.

Factual questions: why did the war start? Difference between Democracy and

Fascism, etc.

A few listen to news, look at maps.

Interest in war movies, comic books, serious books.

Has ideas of organizing scrap collection clubs, saving for defense stamps.

9 YEARS—Detailed, serious, factual almost adult interest. Listens to news; follows maps. Boy asked if he followed war said, "I know Russia is gaining and we captured Leyte."

One says he follows European better than Asiatic war.

Some boys think in terms of whether they prefer Army, Navy or Marines.

DEATH

May ask about slave labor, how can they force people to work for the enemy.
Mature approach and realization.
Surprisingly little aggressive talk about enemy.
Helps with war work (collections, saves for defense stamps).

§5. DEATH

1-3 YEARS—Very little or no understanding of the idea of death.

4 YEARS—Very limited concept of death.

Uses the word with some vague notion of its meaning.

No particular emotion related, though may verbalize a rudimentary notion that death is connected with sorrow or sadness.

5 YEARS—Concept becoming more detailed, accurate and factual. Some recognition of the finality of death, "the end." Though may think it is reversible (5½ years).

Recognize the immobility of the dead.

Attitude quite matter of fact and unemotional.

Bodily actions may come in, associated with death: avoids dead things, or may enjoy killing.

Seems to know as a fact, though apparently does not understand or feel emotion ally, that death is related to age and that oldest often die first.

6 YEARS—New awareness of death. Beginning of an emotional response to the idea of death.

Worries that mother will die and leave him.

Connects killing, possibly illness and hospitals, as well as old age, with death.

Idea of death as result of aggression or killing.

Some preoccupation with graves, funerals, burial.

Disturbed by pictures and stories of children or animals dead or dying.

Does not believe that he himself will die.

7 YEARS—Similar to six years, but more detailed and realistic; better understanding.

Still looks at appurtenances: coffin, burial rites etc.

Rather marked interest in causes of death: old age, violence, disease.

Interest in visiting cemeteries.

Still thinks of death in terms of specific human experience.

Further connection of old age with death, oldest dying first.

May complain, "I wish I were dead."

Suspects that he himself will die. Denies that he will die.

8 YEARS—Progresses from an interest in graves and funerals to interest in what happens after death.

Usually refers death only to humanity though earlier included other species.

Feels that he understands the concept better.

May accept fact that all people, including himself, die.

- 9 YEARS—Reference now made to logical or biological essentials: "not living," "When you have no pulse and no temperature and can't breathe."
Now looks straight at death, not just at the periphery: i.e. coffins, graves.
Accepts quite realistically fact that when he is older he will one day die.
Not a marked interest with most at this age.

§6. DEITY

- 2 YEARS—No appreciable "religious sense."
May enjoy repeating last phrases of prayers.
Some ready for Sunday school if it is run along nursery school lines.
May be afraid of Santa Claus.
- 3 YEARS—May repeat whole prayers, as they do nursery rhymes.
Greater interest in Sunday school: may enjoy church for part of the service.
Santa Claus meaningful and of some interest.
- 4 YEARS—Marked interest in and many detailed factual questions about God. The concept is usually introduced by parents in answer to question of "Why" and "How." Comments and questions likely to be extremely "inappropriate."
Has religion of parents: child believes parents to be omniscient, all-powerful, eternal.
Enjoys prayers and elaborates them from the original.
Enjoys Sunday school and may sit through part of church services—as music.
Firmly believes in Santa Claus, in every detail.
- 5 YEARS—Many continue 4-year-old interest in and questions about God. Some are already losing this marked interest.
Some believe that God is responsible for everything. If child falls, God pushed him.
Enjoys prayers and makes up his own.
Likes Sunday school but may be very restless in church. May enjoy the pageantry.
Realistic approach to God and Santa Claus. Thinks of them as persons living in houses etc.
- 6 YEARS—Grasps idea of God as creator of the world, of animals, of beautiful things.
Asks to go to Sunday School. Loves story of Little Lord Jesus. Emotional interest in this. Interest in angels.
Enjoys a short ritualistic service. May enjoy Sunday school very much.
Prayers are important and child expects them to be answered.
Feeling of two forces: Heaven and Hell, God and the Devil, good and bad.
Profanity involves name of God.
Very firm about belief in Santa Claus; insistent and emotional. Fiercely denies any hint that he is not real.
- 7 YEARS—More thoughtful interest in God and Heaven. Questions becoming more "appropriate."

Beginning of slight skepticism and distinguishing what he knows from what he has merely been told.

Less praying as child takes more responsibility for own night routines.

Sunday school interest; and interest in Bible stories continues.

Beginning skepticism about Santa Claus. Denies some aspects, as that he comes down the chimney. Multiplicity of Santa Clauses seen on street may confuse child.

8 YEARS—Interested in information that soul only, not body, goes to Heaven.

May conceive of death as an immediate act of God, result of disease, or as resulting from disease which in turn is a punishment from God.

Not too much preoccupation about God.

Some still believe in Santa Claus. May deny that he is real, but "protest too much."

May be able to substitute a "spirit of Christmas" or of "giving" for the more physical Santa Claus.

Likes Bible stories and passages from Bible. Likes to say prayers with mother.

9 YEARS—In general interest in God and religious matters is not strong.

May pray spontaneously on occasion if in great need or danger.

Most do not believe in Santa Claus.

Sunday school may be of continued interest if well taught or if associated with "clubs."

Bible story interest shifts to portions of Old Testament, especially historical books

Enjoy memorizing Psalms and passages from Bible, enjoy singing in the choir

A PHILOSOPHIC POSTSCRIPT

Now, having examined the maturing modes of thinking which determine the philosophies of children, perhaps we should say a concluding word about our own philosophy,—and yours as it may bear on problems of child care. For the temper and the techniques of child care depend primarily upon underlying philosophic outlook.

If we wish to do justice to the child's personality, we must think in terms of growth, in terms of his developmental maturity. This means a philosophy which recognizes the relativities of the life cycle.

Developmentalism is the name for such a philosophy. Developmentalism is the very opposite of fascism, for it acknowledges the individuality of the child and wisely concedes that all his behavior is subject to the natural laws of human growth. These natural laws can be comprehended only through science and yet more science. Such science will not conflict with the humanities, because it makes possible an improvement of human relationships. The controls of our culture must be based on a more widely disseminated knowledge of child development.

We live in a technological age; we know something of the precision and the beauty of engines and machines. The rising generation of parents can readily absorb a science of child development which ac-

quaints them with the mechanisms of growth,—with the machinery of behavior. That will be sound self-knowledge. It would make for tolerance and understanding, and a more penetrating appreciation of the meaning of infancy and childhood. Developmentalism is in harmony with the spirit of democracy.

The awesome flash of the atomic bomb has shocked thoughtful men into a realization of the social significance of science in a democratic culture. Even in the first solemn announcement of the new atomic age we were reminded that the proposition which affirms the worth and dignity of man remains "the strongest, most creative force now present in the world."

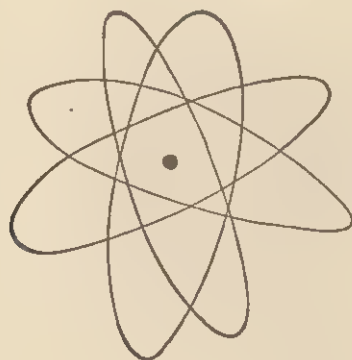
But propositions do not operate automatically. They must be implemented. We cannot maintain this most creative of all propositions unless we understand the energies of man in relation to the energies locked in the nucleus of the atom.

The nature of man is almost as terrifying as the unleashed atom. Terrifying until we comprehend, and thereby govern, his inner forces. Only through profound self-knowledge can the human mind bring itself nearer to individual and collective control. For such self-knowledge we need vast and even dramatic extensions of science, both basic and applied. We need a new science of man, and we need it urgently, for the flash of the bomb has revealed the face of evil.

In the aftermath of war we have to take a second look at the moral constitution of man as embodied or prefigured in children. Here we get a warning glimpse of the race-made and man-made origins of evil. Children can be rude and aggressive. But it would be sadly gratuitous to infer that the failures of adult ways of life are due to the imperfections of children. Sound inheritance greatly reduces these imperfections; and wise management brings the others under control. *The intrinsic charm and goodness of childhood still constitute the best guarantee of the further perfectibility of mankind.*

The most ameliorative force that can be released in the years of reconstruction which lie ahead is an intensified conservation of the development of infants and children. Such conservation depends upon favorable political and economic arrangements: but these in turn are dependent on scientific knowledge, as well as on the aspirations which come from humane traditions, from the arts and from religion. We cannot conserve the mental health of children, we cannot make democracy a genuine folkway unless we bring into the homes of the people a developmental philosophy of child care rooted in scientific research.

A science of man, accordingly, becomes a most creative force in the atomic age. It will heighten and multiply human values. It will diffuse among peoples, among common men, and among leaders of state that increase of intelligibility which is necessary for mutual understanding. In a more sincerely sustained effort to understand children, men and women of maturity will better comprehend themselves and their fellows.



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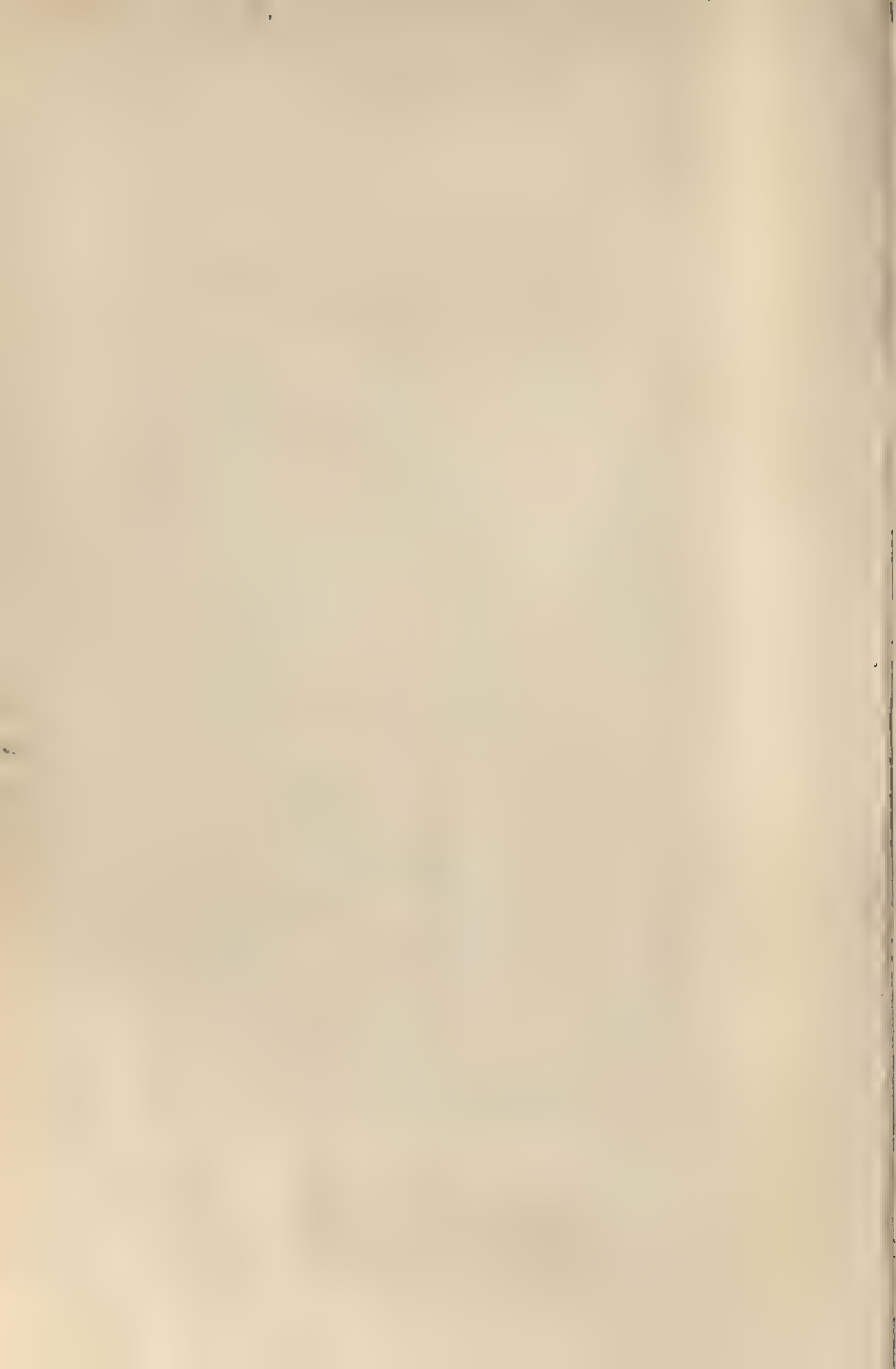
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